

.BZ

i%JWJEFOE 4USBUFHZ&1P5U6PMU35W&34 7"3*"#-& &260ç 0Đ` ð T Á @ •Y™œ±

5"#-& 0' \$0/5&/54

(-044"3: 0' 5&3.4

/7&45.&/5 10-\$*&4

*OWFTUNFOU 0CKFDUJWF BOE 4USBUFHJFT

'VOEBNFOUBM BOE /PO 'VOEBNFOUBM *OWFTUNFOU 1PMJDJFT%(FOFSBM

'VOEBNFOUBM *OWFTUNFOU 1PMJDJFT

%JWFSTJGJDBUJPO

/PO 'VOEBNFOUBM *OWFTUNFOU 1PMJDJFT

\$PNNPEJUZ &YDIBOHF "DU 3FHVMBUJPO%&YDMVTJPO GSPN \$PNNPEJUZ 1P

" 1 1 & / % * 9 " % 1 3 0 9 : 7 0 5 * / (1 0 - * \$ * & 4

" 1 1 & / % * 9 # % \$ 3 & % * 5 3 " 5 * / (4

i-FHH .BTPOw NFBOT -FHH .BTPO *OD

i.BOBHFSw PS '5'" NFBOT 'SBOLMJO 5FNQMFUPO 'VOE "EWJTFS --\$ GP

i/"7w NFBOT OFU BTTFU WBMVF

i/3430Tw NFBOT OBUJPOBMMZ SFDPHOJ[FE PS OPO 6 4 TUBUJTUJDBM S
*OWFTUPST 4FSWJDF *OD i.PPEZ Tw 'JUDI 3BUJOHT BOE 4 1 (MPCBM

i/:4&w NFBOT UIF /FX :PSL 4UPDL &YDIBOHF

i1SPTQFDUVTw NFBOT UIF QSPTQFDUVT PG B 'VOE BT SFGFSFODFE PO

i4"*w NFBOT UIJT 4UBUFNFOU PG "EEJUJPOBM *OGPSNBUJPO

i4&\$w NFBOT UIF 6 4 4FDVSJUJFT BOE &YDIBOHF \$PNNJTJPO

i4FSWJDF "HFOUw NFBOT FB DI CBOL CSPLFS EFBMFS JOTVSBODF DPN
NVUUBM GVOE TVQFSNBSLFU BOE BOZ PUIFS GJOBODJBM JOUFSNFEJBSJ
TIBSFT PG UIF 'VOE

4VCBEWJTFS NFBOT \$MFBS#SJEHF *OWFTUNFOUT --\$ BOE 8FTUFSO "TT
UP JO UIF 'VOEhT 1SPTQFDUVT BOE UIJT 4"*

i5SVTUw JG BQQMJDBC MF NFBOT UIF USVTU MJTUFE PO UIF DPWFS QB

i5SVTUFFTw NFBOT UIF USVTUFFT PG UIF 5SVTU

* / 7 & 4 5 . & / 5 1 0 - * \$ * & 4

* OWFTUNFOU OCKFDUJWF BOE 4USBUFHJFT

5IF 'VOE JT SFHJTUFSFE VOEFS UIF "DU BT BO PQFO FOE NBOB
EJTDVTTFT UIF 'VOE T JOWFTUNFOU PCKFDUJWF BOE TUSBUFHJFT 5IF C
MJNJUBUJPO PG UIF 'VOE BOE TVQQMFNFOUT UIF EFTDSJQUJPO PG UIF
JOGPSNBUJPO SFHBSEJOH JOWFTUNFOU QSBDUJDFT BOE SJTL GBDUPST
FOUJUMFE *Investment Practices and Risk Factors*

- 6OEFS OPSNBM DJSDVNTUBODFT UIF 'VOE JOWFTUT BU MFBTU PG J
 JO FRVJUJZ TFDVSJUUJFT PS PUIFS JOTUSVNFOUT XJUI TJNJMBS FDPOP
 DBQJUBMJ[BUJPOT -BSHF DBQJUBMJ[BUJPO DPNQBOJFT BSF UIPTF DP
 3VTTFMM *OEFY 4FDVSJUUJFT PG DPNQBOJFT XIPTF NBSLFU DBQJUE
 'VOE TUJMM XJMM CF DPOTJEFSFE TFDVSJUUJFT PG MBSHF DBQJUBMJ[B
 'VOE T JOWFTUNFOU QPMJDZ NBZ CF DIBOHFE CZ UIF #PBSE XJUIPV
 TIBSFIPMEFST
- 5IF 'VOE IBT VOEFSUBLFO UIBU JUT JOWFTUNFOU JO XBSSBOUT PS SJH
 UIF WBMVF PG JUT OFU BTTFUT BOE OPU NPSF UIBO PG TVDI BTTFUT
 UIF /:4&
- 5IF 'VOE NBZ JOWFTU VQ UP PG JUT OFU BTTFUT BU UIF UJNF PG J
 EFQPTJUBSZ SFDFJQUT
- 5IF 'VOE NBZ EFTJHOBUF OP NPSF UIBO PG UIF 'VOE T OFU BTTFUT

• 5IF 'VOE NBZ EFTJHOBUEF OP NPSF UIBO PG UIF 'VOE T OFU BTTFUT
DPMMBUFSBM GPS TIPSU TBMFT BU BOZ POF UJNF

4NBMM \$BQ (SPXUI 1PSUGPMJP

- *Investment objective* 5IF 'VOE TFFLT MPOH UFSN HSPXUI PG DBQJUBM
- 6OEFS OPSNBM DJSDVNTUBODFT UIF 'VOE JOWFTUT BU MFBTU PG J
DBQJUBMJ[BUJPOT BOE SFMBUFE JOWFTUNFOUT 'PS UIF QVSQPTFT PG
XJUI NBSLFU DBQJUBMJ[BUJPO WBMVFT OPU FYDFFEJOH J CJMMJPC
TUPDL JO UIF 3VTTFMM *OEFY GPS UIF QSFWJPT NPOUIT XIJDIF
DBQJUBMJ[BUJPOT OP MPOHFS NFFU UIJT EFGJOJUJPO BGUFS QVSDIBT
DBQJUBMJ[BUJPO DPNQBOJFT GPS UIF QVSQPTF PG UIF 'VOE T JOWF
DIBOHFE CZ UIF #PBSE XJUJPU TIBSFIPMEFS BQQSPWBM VQPO EBZT
- 5IF 'VOE NBZ JOWFTU VQ UP PG JUT BTTFUT JO FRVJUZ TFDVSJUJFT
DPNQBOJFT
- 5IF 'VOE NBZ JOWFTU VQ UP PG JUT BTTFUT JO OPO DPOWFSUJCMF
CFMJFWFT UIBU UIFJS UPUBM SFUVSO QPUFOUJBM FRVBMT PS FYDFFEF
- 5IF 'VOE NBZ JOWFTU VQ UP PG JUT OFU BTTFUT BU UIF UJNF PG J
EFQPTJUBSZ SFDFJQUT
- 5IF 'VOE NBZ EFTJHOBUEF OP NPSF UIBO PG UIF 'VOE T OFU BTTFUT
DPMMBUFSBM GPS TIPSU TBMFT BU BOZ POF UJNF

'VOEBNFOUBM BOE /PO 'VOEBNFOUBM *OWFTUNFOU 1PMJDJFT

(FOFSBM

5IF 'VOE IBT BEPQUFE UIF GVOEBNFOUBM BOE OPO GVOEBNFOUBM
TIBSFIPMEFST 'VOEBNFOUBM JOWFTUNFOU QPMJDJFT PG UIF 'VOE NBZ
OPO GVOEBNFOUBM JOWFTUNFOU QPMJDJFT BU BOZ UJNF XJUJPU TIBS

*G BOZ QFSDFOUBHF SFTUSJDUJPO EFTDSJCFE CFMPX PUIFS UIBO
JOWFTUNFOU B MBUFS JODSFBTF PS EFDSFBTF JO UIF QFSDFOUBHF SF
DPOTUJUVUF B WJPMBUJPO PG TVDI SFTUSJDUJPO VOMFTT PUIFSXJTF

5IF 'VOE T JOWFTUNFOU PCKFDUJWF JT OPO GVOEBNFOUBM

'VOEBNFOUBM *OWFTUNFOU 1PMJDJFT

5IF 'VOE T GVOEBNFOUBM JOWFTUNFOU QPMJDJFT BSF BT GPMMPX

#PSSPXJOH 5IF 'VOE NBZ OPU CPSSPX NPOFZ FYDFQU BT QFS
NPEJGJDBUJPO CZ UIF 4&\$ 4&\$ TUBGG PS PUIFS BVUIPSJUZ XJUI
QFSNJTTJPO GSPN UIF 4&\$ 4&\$ TUBGG PS PUIFS BVUIPSJUZ

6OEFSXSJUJOH 5IF 'VOE NBZ OPU FOHBHF JO UIF CVTJOFTT P
FYDFQU BT QFSNJUUFE CZ J UIF "DU PS JOUFSQSFUBUJPO PS
BQQSPQSBUBUF KVSJTEJDUJPO PS JJ FYFNQUJWF PS PUIFS SFMJF

-FOEJOH 5IF 'VOE NBZ MFOE NPOFZ PS PUIFS BTTFUT UP UIF
JOUFSQSFUBUJPO PS NPEJGJDBUJPO CZ UIF 4&\$ 4&\$ TUBGG PS
PS PUIFS SFMJFG PS QFSNJTTJPO GSPN UIF 4&\$ 4&\$ TUBGG PS PU

4FOJPS 4FDVSJUJFT 5IF 'VOE NBZ OPU JTTVF TFOJPS TFDVSJU
JOUFSQSFUBUJPO PS NPEJGJDBUJPO CZ UIF 4&\$ 4&\$ TUBGG PS
PS PUIFS SFMJFG PS QFSNJTTJPO GSPN UIF 4&\$ 4&\$ TUBGG PS PU

3FBM &TUBUF 5IF 'VOE NBZ OPU QVSDIBTF PS TFMM SFBM FTU
JOUFSQSFUBUJPOT PS NPEJGJDBUJPOT CZ UIF 4&\$ 4&\$ TUBGG PS
PS PUIFS SFMJFG PS QFSNJTTJPO GSPN UIF 4&\$ 4&\$ TUBGG PS PU
\$PNNPEJUJFT 5IF 'VOE NBZ QVSDIBTF PS TFMM DPNNPEJUJFT
QFSNJUUFE CZ J UIF "DU PS JOUFSQSFUBUJPOT PS NPEJGJDB

GVOE UIBU JOWFTUT B TJHOJGJDBOU QFSDFOUBHF PG JUT UPUBM E
BEWFSTF FWFOUT BGGFDOUJOH UIBU JOEVTUSZ BOE NBZ CF NPSF SJ
QPMJDZ BCPWF XJMM CF JOUFSQSFUFE UP SFGFS UP DPODFOUSBUJ
BMTP XJMM CF JOUFSQSFUFE UP QFSNJU JOWFTUNFOU XJUIPVU MJ
BHFODJFT PS JOTUSVNFOUBMJUJFT TFDVSJUJFT PG TUBUF UFSSJ
BHFODJFT JOTUSVNFOUBMJUJFT PS QPMJUJDBM TVCEJWJTJPOT TF
DPMMBUFBSBMJ[FE CZ BOZ TVDI PCMJHBUIJPOT "DDPSEJOHMZ JTTV
NFNCFST PG BOZ JOEVTUSZ 5IFSF BMTP XJMM CF OP MJNJU PO JOY
DPVOUSZ 5IF QPMJDZ BMTP XJMM CF JOUFSQSFUFE UP HJWF CSPB
BNPOH JOEVTUSJFT

5IF 'VOE T GVOEBNFOUBM QPMJDJFT XJMM CF JOUFSQSFUFE C
SFGFS UP UIF "DU BOE UIF SFMBUFE SVMFT BT UIFZ BSF JO FGO

'5\$ *O BEEJUUPO UP NFFUJOH POF PG UIF GPSFHPJOH USBEJOH MJNJU
PUIFSXJTF BT B WFIJDMF GPS USBEJOH JO UIF NBSLFUT GPS \$PNNPEJUZ

*G UIF 'VOE T PQFSBUPST XFSF UP MPTF UIFJS BCJMJUZ UP DMBJN
SFRVJSFE UP DPNQMZ XJUI DFSUBJO '5\$ SVMFT SFHBSEJOH DPNNPEJUZ
DPNQMJBOBF PCMJHBUJPOT

/7&45.&/5 13"\$5\$&4 "/% 3*4, '"\$5034

*O BEEJUUPO UP UIF JOWFTUNFOU TUSBUFHJFT BOE UIF SJTLT EFTD
*OWFTUNFOU OCKFDUJWF BOE 4USBUFHJFT UIF 'VOE NBZ FNQMPZ PUIFS
BSF EFTDSJCFE CFMPX 5IF 'VOE NBZ FOHBHF JO UIF QSDUJDFT EFTDS

MPDBUFE JG UIF CSBODI JT MJDFOTFE JO UIBU TUBUF *O BEEJUIPO CS
MJDFOTFE CZ DFSUBJO TUBUFT i4UBUF #SBODIFTw NBZ PS NBZ OPU CF
B EFTJHOBUE CBOL XJUIJO UIF TUBUF BOE C NBJOUBJO BTTFUT XJUI
BHHSFHBUFE BNPVOU PG MJBCJMJUJFT PG UIF GPSFJHO CBOL QBZBCMF E
EFQPTJUT PG 4UBUF #SBODIFT NBZ OPU OFDFTTBSJMZ CF JOTVSFE CZ U
JOGPSNBUJPO BCPVU B 6 4 CSBODI PG B GPSFJHO CBOL UIBO BCPVU B

7PMBUJMJUJZ JO UIF CBOLJOH TZTUFN NBZ JNQBDU UIF WJBCJMJUJZ
GBJMVSF PG BOZ PG UIF GJOBODJBM JOTUJUVUJJPOT XIFSF UIF 'VOE NBZ
UIF 'VOE XPVME CF BCMF UP BDDFTT VOJOTVSFE GVOET JO B UJNFMZ NI
DPVME BEWFSTFMZ BGGFDU UIF CVTJOFTT MJRVJEJUZ GJOBODJBM QPT

#FODINBSL 3FGFSFODF 3BUFT 3JTL

.BOZ EFCU TFDVSJUJFT EFSJWBUIJWFT BOE PUIFS GJOBODJBM JOT
JOUFSFTU SBUF DBMDVMBUJJPOT JODMVEJOH UIF &VSP *OUFSCBOL OGG
OWFSOJHIU 'JOBODJOH 3BUF FBI B i3FGFSFODF 3BUFw *OTUSVNFOUT
CBTFE PO TVDI 3FGFSFODF 3BUFT PS NBZ CF TVCKFDU UP JOUFSFTU DB
PG JOTUSVNFOUT JO XIJDI UIF 'VOE JOWFTUT NBZ BMTF PCUBJO GJOBOD
FMJNJOBUIJPO PG B 3FGFSFODF 3BUF PS BOZ PUIFS DIBOHFT UP PS SFG
IBWF BO BEWFSTF JNQBDU PO UIF NBSLFU GPS PS WBMVF PG BOZ JOTU

'PS FYBNQMF TPNF 3FGFSFODF 3BUFT BT XFMM BT PUIFS UZQFT P
IBWF CFFO UIF TVCKFDU PG POHPJOH OBUJPOBM BOE JOUFSOBUJPOBM
JOEJDFT VTTF BT CFODINBSLT JO GJOBODJBM JOTUSVNFOUT BOE GJOBOD
#FODINBSLT 3FHVMBUJPO IBT CFFO FOBDFE JOUP 6OJUFE ,JOHEPN MBX
BNFOEFE TVCKFDU UP BNFOENFOUT NBEF CZ UIF #FODINBSLT "NFOEN
4* BOE PUIFS TUBUVUPSZ JOTUSVNFOUT 'PMMPXJOH UIF JNQMF
CFODINBSLT IBT DIBOHFE BOE NBZ GVSUIFS DIBOHF JO UIF GVUVSF XJU
UIBO JO UIF QBTU UIF VTF PG CFODINBSLT UIBU BSF OPU DPNQMJBOU
SFTUSJDUFE BOE DFSUBJO CFODINBSLT NBZ CF FMJNJOBUE FOUJSFMZ
EJTSVQUJJPOT JO MJRVJEJUZ GPS JOTUSVNFOUT UIBU SFMZ PO PS BSF J
DPOTFRVFODFT XIJDI DBOOPU CF QSFEJDUFE

\$PNNFSDJBM 1BQFS

\$PNNFSDJBM QBQFS JODMVEJOH WBSJBCMF BNPVOU NBTUFS EFN
VOTFDVSFE QSPNJTTPSZ OPUFT JTTVFE CZ DPSQPSBUJJPOT QBSUOFSTIJ

\$PNNPO 4UPDL

\$PNNPO TUPDLT BSF TIBSFT PG PXOFSTIJQ JO B DPSQPSBUJPO PS
QSPGJUT PG UIF DPSQPSBUJPO JG BOZ EJTSVJCVUFE BT EJWJEFOET U
TIBSFIPMEFS PS DMBTT PG TIBSFIPMEFST JODMVEJOH IPMEFST PG UIF
TUPDL VTVBMMZ DBSSJFT XJUI JU UIF SJHIU UP WPUF BOE GSFRVFOUMZ

\$POWFSUJCMF 4FDVSJUJFT

\$POWFSUJCMF TFDVSJUJFT BSF GJYFE JODPNF TFDVSJUJFT VTVBM
GPS B QSFTDSJCFE BNPVOU PG DPNNPO TUPDL PS PUIFS FRVJUZ TFDVS
UJNF BU B TQFDJGJFE QSJDF PS GPSNVMB " DPOWFSUJCMF TFDVSJUJZ F
EJWJEFOE QBJE PO QSFGFSSFE TUPDL VOJUM UIF DPOWFSUJCMF TFDVS
DPOWFSTJPO PS FYDIBOHF DPOWFSUJCMF TFDVSJUJFT PSEJOBSJMZ QS
DPNNPO TUPDLT PG UIF TBNF PS TJNJ@OWF VD`EFTUSF 'P `ððððDV TJNJ@

TFDVSJUUJFT BSF VTVBMMZ TVCPSEJOBUE UP DPNQBSBCMF OPODPOWFS
DPSQPSBUJPO T DBQJUBM TUSVDUVSF

5IF WBMVF PG B DPOWFSUJCMF TFDVSJUJ JT HFOFSBMMZ SFMBUFE
DPNQBSBCMF NBUVSJUJ BOE RVBMJUJ UIBU EP OPU IBWF B DPOWFSTJPC
FYDIBOHFE JOUP UIF VOEFMZJJOH DPNNPO TUPDL " DPOWFSUJCMF TFD
QSJDF FTUBCMJTIFE JO UIF DPOWFSUJCMF TFDVSJUJ T HPWFSSOJJOH JOT
WBMVF

\$POWFSUJCMF TFDVSJUUJFT BSF TVCKFDU UP TUPDL NBSLFU BOE PU
JOUFSFTU SBUF BOE PUIFS SJTLT BTTPDJBUFE XJUI GJYFE JODPNF TFDV
DPOWFSUJCMF TFDVSJUJ GBMMT UIF DPOWFSUJCMF TFDVSJUJ UFOET U
"T UIF NBSLFU QSJDF PG TVDI FRVJUJ TFDVSJUJ SJTFT UIF DPOWFSUJ
GFBUVSFT *OWFTUNFOUT JO DPOWFSUJCMF TFDVSJUUJFT HFOFSBMMZ FC

4ZOUIFUJD \$POWFSUJCMF 4FDVSJUJFT

" TZOUIFUJD DPOWFSUJCMF TFDVSJUJ JT DPNQSJTIFE PG UXP EJTUJ
DFSUBJO SFTQFDUT 4ZOUIFUJD DPOWFSUJCMF TFDVSJUUJFT BSF DSFBUF
DPNNPO TUPDLT XBSSBOUT PS TUPDL DBMM PQUJPOT 5IF PQUJPOT UIBU
MJTUFE PO B TFDVSJUUJFT FYDIBOHF 5IF UXP DPNQPOFOUT PG B TZOUIF
TBNF FOUJUJ HFOFSBMMZ BSF OPU PGGFSFE BT B VOJU BOE NBZ CF Q
~~DPOWFSUJCMF TFDVSJUJ~~ DPOWFSUJCMF TFDVSJUJFT JO
DPOWFSUJCMF TFDVSJUJ IBT B TFQBSBUF NBSLFU WBMVF BOE SFTQPOE

FYUFOU UIF 'VOE IPMET B OFHBUJWFMZ ZJFMEJOH EFCU TFDVSJUZ PS IE
HFOFSBUF B OFHBUJWF SFUVSO PO UIBU JOWFTUNFOU \$BTI QPTJUJPOT
'VOEhT CBOL %FCU NBSLFU DPOEJUJPOT BSF IJHIMZ VOQSFEJDUBCMF E
PS OFHBUJWF JOUFSFTU SBUF FOWJSPONFOU TPNF JOWFTUPST NBZ TF
DBVTF UIF QSJDF PG TVDI IJHIFS ZJFMEJOH JOTUSVNFOUT UP SJTF DPV
BOE NBZ MJNJU UIF 'VOEhT BCJMJUZ UP MPDBUF GJYFE JODPNF JOTUSV
NPOFUBSZ QPMJDZ NBZ FYBDFSCBUF UIF SJTLT BTTPDJBUFE XJUI DIBOH
GPSFJHO DFOUSBM CBOLT IBWF UBLFO TUFQT UP TUBCJMJ[F NBSLFUT C
6 4 HPWFSONFOU CFHBO JNQMFNFOUJOH JODSFBTFT UP UIF GFEFSBM G

- *Risks of Derivatives Generally* 5IF VTF PG EFSJWBUJWFT JOWPMWFT TQFDJBM DPOTJ TVNNBSJ[FE CFMPX BOE NBZ SFTVMU JO MPTTFT UP UIF 'VOE *O HFC NBZ JOWPMWF B TNBMM JOWFTUNFOU PG DBTI SFMBUJWF UP UIF NBH JO EFSJWBUJWFT NBZ NBHOJGZ PS PUIFSXJTF JODSFBTF JOWFTUNFOU
- *Market risk* %FSJWBUJWFT DBO CF DPNQMFY BOE UIFJS TVDDFTT EFQFOET DPSSFDUMZ GVUVSF NBSLFU PS PUIFS USFOET PS PDDVSSFODFT PS P JOTUSVNFOU &WFO JG UIF QPSUGPMJP NBOBHFS T GPSFDBTUT BSFD NBSLFUT UIBU SFTVMU JO MPTTFT PS PUIFSXJTF VOTVDDFTTGVM USB FTQFDJBMMZ JO BCOPSNBM PS WPMBUJMF NBSLFU DPOEJUJPOT 5IF N VOEFMZZJOH JOTUSVNFOU NBZ DIBOHF JO B XBZ UIBU JT BEWFSTF U

*G UIF 'VOE IBT VTFE EFSJWBUJWFT UP IFEHF PS PUIFSXJTF SFEVD
EJTQPTFT PG UIBU QPTJUJPO BU B UJNF BU XIJDI JU DBOOPU BMTP TFU

DVSSFODJFT UIF WBMVF PG XIJDI UIF QPSUGPMJP NBOBHFS CFMJFWFT
DVSSFODZ CFJOH IFEHFE 5IF SJTL UIBU NPWFNFOUT JO UIF QSJDF PG U
NPWFNFOUT JO UIF QSJDF PG UIF DVSSFODZ TVCKFDU UP UIF IFEHJOH U

Currency Instruments Risks *O BEEJUJPO UP UIF SJTLT GPVOE VOEFS i%FSJWBUJ
\$VSSFODZ *OTUSVNFOUT BSF TVCKFDU UP UIF GPMMPXJOH SJTLT

5IF WBMVF PG \$VSSFODZ *OTUSVNFOUT EFQFOET PO UIF WBMVF PG
#FDBVTF GPSFJHO DVSSFODZ USBOTBDUJ POT PDDVSSJOH JO UIF JOUFS
JOWPMWFE JO UIF 'VOE T VTF PG TVDI \$VSSFODZ *OTUSVNFOUT UIF 'VO
HFOFSBMMZ DPOTJTUJOH PG USBOTBDUJ POT PG MFTT UIBO NJMMJPO
UIBO GPS SPVOE MPUT 5IFSF JT OP TZTUFNBUJD SFQPSUJOH PG MBTU
UIBU RVPUBUJ POT BWBJMBCMF UISPVHI EFBMFST PS PUIFS NBSLFU TPV
HFOFSBMMZ JT SFQSFTFOUBUJWF PG WFSZ MBSHF USBOTBDUJ POT JO UI
XISF SBUFT NJHIU CF MFTT GBWPSBCMF 5IF JOUFSCBOL NBSLFU JO GF
UIF 6 4 PQUJPOT PS GVUVSFT NBSLFUT BSF DMPTFE XIJMF UIF NBSLFUT
SBUF NPWFNFOUT NJHIU UBLF QMBDF JO UIF VOEFMZZJOH NBSLFUT UIBU
*OTUSVNFOUT VOUJM UIFZ SFPQFO

4FUUMFNFOU PG IFEHJOH USBOTBDUJ POT JOWPMWJOH GPSFJHO DV
JTTVJOH UIF VOEFMZZJOH DVSSFODZ 5IVT UIF 'VOE NJHIU CF SFRVJSF
BDDPSEBODF XJUI BOZ 6 4 PS GPSFJHO SFHVMBUJ POT SFHBSEJOH UIF
BOE NJHIU CF SFRVJSFE UP QBZ BOZ GFFT UBYFT BOE DIBSHFT BTTPDJ
'PSXBSE \$VSSFODZ \$POUSBDUT

5IF 'VOE NBZ FOUFS JOUP GPSXBSE DVSSFODZ DPOUSBDUT UP QVS
EPMMBST PS BOPUIFS DVSSFODZ BU B GVUVSF EBUF BOE BU B QSJDF TF
DPOUSBDUT BSF USBEFE EJSFDUMZ CFUXFFO DVSSFODZ USBEFST VTVB

5IF 'VOE NBZ QVSDIBTF B GPSXBSE DVSSFODZ DPOUSBDU UP MPDL
GPSFJHO DVSSFODZ UIBU UIF 'VOE JOUFOET UP BDRVJSF B MPOH IFEHF
EPMMBS FRVJWBMFOU PG UIF QSPDFFET GSPN UIF BOUJJDJQBUFE TBMF
DVSSFODZ B TIPSU IFEHF " iQPTJUJPO IFEHFw JT XIFO UIF 'VOE PXOT
BHBJOTU B QPTTJCMF EFDMJOF JO UIF FVSP T WBMVF UIF 'VOE FOUFST
EPMMBST " iQPTJUJPO IFEHFw UFOET UP PGGTFU CPUI QPTJUJWF BOE
TFDVSJUJ WBMVFT DBVTFE CZ PUIFS GBDUPST " iQSPYZ IFEHFw JT XIFC
BOE UP QSPUFDU BHBJOTU B QPTTJCMF EFDMJOF JO UIF FVSP T WBMVF
FYQFDUFE UP QFSGPSN TJNJMBSMZ UP UIF FVSP JO SFUVSO GPS 6 4 EP
PS FGGJDFODZ CVU HFOFSBMMZ XPVME OPU IFEHF DVSSFODZ FYQPTV
EPFT OPU QFSGPSN TJNJMBSMZ UP UIF UBSHFUFE DVSSFODZ 5IF 'VOE D
UIF FVSP BOE QSPYZ DVSSFODZ BOE CFUXFFO UIF QSPYZ DVSSFODZ BO
BUUFNQU UP FOIBODF SFUVSO PS ZJFME 5IF 'VOE DPVME VTF GPSXBSE
UIBU UIF QPSUGPMJP NBOBHFS CFMJFWFT NJHIU SJTF JO WBMVF SFMBU
GMVDUVBUJ POT GSPN POF DVSSFODZ UP BOPUIFS 'PS FYBNQMF JG UIF
JO WBMVF SFMBUJWF UP UIF FVSP UIF 'VOE DPVME XSJUF B GPSXBSE D
PSEFS UP TFMM UIPTF 6 4 EPMMBST GPS B QSPGJU JG UIF 6 4 EPMMBS
'VOE PG FOHBHJOH JO GPSXBSE DVSSFODZ DPOUSBDUT WBSJFT XJUI GB
QFSJPE BOE UIF NBSLFU DPOEJUJ POT UIF QSFWBJMJOH #FDBVTF GPS
CBTJT OP GFFT PS DPNNJTJ POT BSF JOWPMWFE 8IFO UIF 'VOE FOUFS
UP NBLF PS UBLF EFMJWFSZ PG UIF VOEFMZZJOH DVSSFODZ BU UIF NBU
DPOOFDUJPO XJUI TFUUMFNFOU 'BJMVSF CZ UIF DPVOUFSQBSUZ UP EP
USBOTBDUJPO

5IF QSFDJTF NBUDIJOH PG GPSXBSE DVSSFODZ DPOUSBDU BNPVOU
CF QPTTJCMF CFDBVTF UIF WBMVF PG TVDI TFDVSJUJFT NFBTVSFE JO U

"U UIF JODFQUJPO PG B GVUVSFT DPOUSBDU UIF 'VOE JT SFRVJSFE
NFS DIBOU i'\$.w JO BO BNPVOU BU MFBTU FRVBM UP UIF BNPVOU EFTJH
XIFO XSJUJ OH B DBMM PS QVU PQUJPO PO B GVUVSFT DPOUSBDU JO BD
USBOTBDUJ POT JOJUJBM NBSHJO PO GVUVSFT DPOUSBDUT EPFT OPU S
PS HPPE GBJUI EFQPTJU UIBU JT SFRVJSFE UP CF SFUVSOFE UP UIF 'VO
IBWF CFFO TBUJTGFJE 6OEFS DFSUBJO DJSDVNTUBODFT TVDI BT QFSJ
CZ JUT '\$. UP JODSFBTF UIF MFWFM PG JUT JOJUJBM NBSHJO QBZNF OUF
GVUVSF CZ SFHVMBUPSZ BDUJPO

*O BEEJUJPO UP JOJUJBM NBSHJO QBZNF OUF EVSJOH UIF MJGF PG
GSPN UIF '\$. BT UIF WBMVF PG UIF NBSHJO BOE UIF VOEFM ZJOH EFSJW
NBSLFU w 7BSJBUJPO NBSHJO JT JOUFOEFE UP SFQSFTFOU B EBJMZ TFL
QVSDIBTFT BO PQUJPO PO B GVUVSFT DPOUSBDU UIF QSFNJVN QBJE QM
DJSDVNTUBODFT XIFO UIF QVSDIBTF PG BO PQUJPO PO B GVUVSFT DPOU
DPOUSBDU XPVME OPU TVDI BT XIFO UIFS F JT OP NPWFNF OUF JO UIF WB
UIF 'VOE XPVME MPTF UIF QSFNJVN JU QBJE GPS UIF PQUJPO QMVT USB
GVUVSFT DPOUSBDU PS XSJUFT B DBMM PS QVU PQUJPO UIFSFO JU JT
FWFOU PG BEWFSTF QSJDF NPWFNF OUF *G UIF 'VOE IBT JOTVGGJDJFOU
TFMM TFDVSJUJFT BU B UJNF XIFO TVDI TBMFT BSF EJTBEWBOUBHFPVT

"MUIPVHI TPNF GVUVSFT BOE PQUJPOT PO GVUVSFT DBMM GPS NBL
HFOFSBMMZ UIPTF DPOUSBDUT BSF DMPTFE PVU QSJPS UP EFMJWFSZ C
JOWPMWJOH UIF TBNF JOTUSVNF OUF PS BTTFU BOE EFMJWFSZ NPOUI *
UIF 'VOE SFBMJ[FT B HBJO PS JG JU JT NPSF UIF 'VOE SFBMJ[FT B MPT
QSJDF UIF 'VOE SFBMJ[FT B HBJO PS JG JU JT MFTT UIF 'VOE SFBMJ[F
XIJDI XJMM CF JODMVEFE JO UIFTF DBMDVMBUJ POT 1PTJUJ POT JO GVU
CPBSE PG USBEF UIBU QSPWJEFT B TFDPOEBSZ NBSLFU)PXF WFS UIFS
GPS B QBSUJDVMBS DPOUSBDU BU B QBSUJDVMBS UJNF *O TVDI FWFOU

6OEFS DFSUBJO DJSDVNTUBODFT GVUVSFT FYDIBOHFT NBZ FTUBCM
DPOUSBDU PS BO PQUJPO PO B GVUVSFT DPOUSBDU DBO WBSJN JNN UIF
JOO DJT DPG E FYPF PQUO P€ P @ ð@`0` `0 @ PĐ 0à p@à`` p P•`Đ ð Đ

1PTJUJPOT JO GVUVSFT DPOUSBDUT BOE SFMBUFE PQUJPOT NBZ C
QSPWJEFT B NBSLFU GPS TVDI DPOUSBDUT "MUIPVHI UIF 'VOE JOUFOET
FYDIBOHFT PS CPBSET PG USBEF XIFS UIFS BQQFBST UP CF B MJRVJE
BOZ QBSUJDVMBS DPOUSBDU BU BOZ QBSUJDVMBS UJNF *O TVDI FWFOU
BEWFSTF QSJDF NPWFNFOUT UIF 'VOE XPVME DPOUJOVF UP CF SFRVJS
IBWF B MJNJUFE MJGF BOE UIVT DBO CF EJTQPTFE PG POMZ XJUIJO B T

1VSDIBTFST PG PQUJPOT PO GVUVSFT DPOUSBDUT QBZ B QSFNJVN
BEWFSTF QSJDF NPWFNFOUT DPVME CF MPTU 4FMMFST PG PQUJPOT PO
BEEJUJPOBM NBSHJO DBMMT UIBU DPVME CF TVCTUBOUJBM JO UIF FWFOU
SFRVJSFE GVUVSFT USBEJOH JOWPMWFT B IJHI EFHSFF PG MFWFSBHF
NBZ SFTVMU JO JNNFEJBUF BOE TVCTUBOUJBM MPTT PS HBJO UP UIF '
SFTVMU JO B IJHIFS QPSUGPMJP UVSOPWFS SBUF TFF i1PSUGPMJP 5SB
PG BEEFE CSPLFSBHF DPNNJTTPOT

"T OPUFE BCPWF FYDIBOHFT NBZ JNQPTF MJNJUT PO UIF BNPVOU C
JT QFSNJUUFE UP DIBOHF JO B TJOHMF EBZ *G UIF QSJDF PG B DPOUSE
VOBCMF EVSJOH UIBU UJNF UP DMPTF JUT QPTJUJPO JO UIBU DPOUSBDU
\$'5\$ BOE EPNFTUJD FYDIBOHFT IBWF BMTP FTUBCMJTIFE BOE DPOUJOV
NBYJNVN TQFDVMBUJWF QPTJUJPO UIBU BOZ QFSTPO PS HSPVQ PG QFS

&YDIBOHF USBEFE PQUJPOT JO UIF 6OJUFE 4UBUFT BSF JTTVFE CZ
XIJDI UIF PQUJPO JT MJTUFE BOE BSF TUBOEBSEJ[FE XJUI SFTQFDU UP
QSJDF *O DPOUSBTU 05\$ PQUJPOT PQUJPOT OPU USBEFE PO FYDIBOH
TFDVSJUJFT EFBMFS PS B CBOL XJUI OP DMFBSJOH PSHBOJ[BUJPO HVB
OFHPUJBUJPO XJUI UIF PUIFS QBSUZ UP UIF PQUJPO DPOUSBDU UIF DP

UIF 'VOE XJMM CF SFRVJSFE UP QBZ UIF EJGGFSFODF CFUXFFO UIF DMP
BQQMJDBC MF NVMUJQMJFS UP UIF BTTJHOFE XSJUFS

Timing Risk 5IF IPVST PG USBEJOH GPS PQUJPOT NBZ OPU DPOGPSN UP
USBEFE 5P UIF FYUFOU UIBU UIF PQUJPOT NBSLFUT DMPTF CFGPSF UIF
NPWFNFOUT DBO UBLF QMBDF JO UIF VOEFMZJOH NBSLFUT UIBU DBOO
NBSLFU EBJMZ BOE UIFJS WBMVF XJMM CF BGGFDUFE CZ DIBOHFT JO UI
PG UIF VOEFMZJOH TFDVSJUJFT BO JODSFBTF JO JOUFSFTU SBUFT DI
VOEFMZJOH JOTUSVNFOU BOE UIF SFNBJOJOH UJNF UP UIF PQUJPOT F
BEKVTFE EPXOXBSE CFGPSF UIF PQUJPO T FYQJSBUJPO BT B SFTVMU F

GBWPSBCMF UP UIF 'VOE UIBO UZQJDBM 05\$ TXBQ EPDVNFOUBUJPO 'P
JOEFNOJUZ CZ UIF 'VOE JO GBWPS PG UIF DMFBSJOH NFNCFS JOEFNOJ
XJUI BDUJOH BT UIF 'VOE T DMFBSJOH NFNCFS BOE UIF EPDVNFOUBUJPO
SFNFEJFT JG UIF DMFBSJOH NFNCFS EFGBVMUT PS CFDPNFT JOTPMWFO

4PNF UZQFT PG DMFBSFE TXBQT BSF SFRVJSFE UP CF FYFDVUFE PO
4&' JT B USBEJOH QMBUGPSN XIFSF NVMUJQMF NBSLFU QBSUJDJQBOUT
PUIFS QBSUJDJQBOUT JO UIF QMBUGPSN 8IJMF UIJT FYFDVUJPO SFRVJ
DMFBSFE TXBQ NBSLFU USBEJOH PO B 4&' DBO DSFBUF BEEJUJPOBM DF
GFFT BOE JG UIF 'VOE FYFDVUFT TXBQT PO B 4&' UISPVHI B CSPLFS JO
UIF 'VOE NBZ JOEFNOJGZ B 4&' PS B CSPLFS JOUFSNFEJBSZ XIP FYFDV
MPTTFT PS DPTUT UIBU NBZ CF JODVSSFE BT B SFTVMU PG UIF 'VOE T U

5IF 'VOE NBZ FOUFS JOUP TXBQ USBOTBDUJPO XJUI DFSUBJO DPV
NBTUFS OFUJJOH BHSFFNFOU QSPWJEFT UIBU BMM TXBQT FOUFSFE JOU
QBSUT PG BO JOUFHSBM BHSFFNFOU *G BNPVOUT BSF QBZBCMF PO B Q
TXBQ USBOTBDUJPO UIF BNPVOU QBZBCMF TIBMM CF UIF OFU BNPVOU
QBSUZ PS JUT BGGJMJBUFF EFGBVMUT HFOFSBMMZ PS PO BOZ TXBQ U
"T B SFTVMU UP UIF FYUFOU UIF 'VOE FOUFST JOUP NBTUFS OFUJJOH E
UFSNJOBUFF B HSFBUFS OVNCFS PG TXBQ BHSFFNFOUT UIBO JG JU IBE O
UIF 'VOE

Interest Rate Swaps, Caps and Floors *OUFSFTU SBUF TXBQT BSF BHSFFNFOUT CFUXFF
SBUF QBZNFOUT PCMJHBUJPO P `••@`p``đ Pđ

QBSTM„pP•` p`đPđ

5IF 'VOE NBZ BMTP QVSDIBTF DSFEJU EFGBVMU TXBQ DPOUSBDUT U
TFDVSJUJFT IFME JO JUT QPSUGPMJP JO XIJDI DBTF UIF 'VOE XPVME G
5IJT XPVME JOWPMWF UIF SJTL UIBU UIF JOWFTUNFOU NBZ FYQJSF XPSU
EFGBVMU CZ UIF JTTVFS PG UIF VOEFMZHJH PCMJHBUJPO PS BT BQQ
*U XPVME BMTP JOWPMWF DSFEJU SJTL%UIBU UIF TFMMFS NBZ GBJM UP

5IF 'VOE NBZ JOWFTU JO DSFEJU EFGBVMU TXBQ JOEFY QSPEVDUT
'VOE DBO FJUIFS CVZ UIF JOEFY UBLF PO DSFEJU FYQPTVSF PS TFMM
JOWFTUNFOUT BSF TVCKFDU UP UIF BTTPDJBUFE SJTLT XJUI JOWFTUNFO

%JTUSFTTTFE %FCU 4FDVSJUJFT

%JTUSFTTTFE EFCU TFDVSJUJFT BSF EFCU TFDVSJUJFT UIBU BSF QV
CBOLSVQUDZ QSPDFFEJOHT PS PUIFSXJTF JO EFGBVMU BT UP UIF SFQB
'VOE PS BSF SBUFE JO UIF MPXFS SBUJH DBUFHPSJFT \$B PS MPXFS C
KVEHNFOU PG UIF QPSUGPMJP NBOBHFS PG FRVJWBMFU RVBMJUZ *OW
TJHOJGJDBOU SJTL 5IF SJTLT BTTPDJBUFE XJUI IJHI ZJFME TFDVSJUJFT

5IF 'VOE NBZ NBLF TVDI JOWFTUNFOUT XIFO UIF QPSUGPMJP NBOBH
EJTUSFTTTFE EFCU TFDVSJUJFT XJMM NBLF BO FYDIBOHF PGGFS PS XJMM

UIF BNPVOU JU JOWFTUFE JO UIF &5' \$FSUBJO &5'T BSF BDUJWFMZ NBC
JOWFTUNFOU EFDJTJPOT PO 6OEFSMZJOH "TTFUT XJU IPVU TFFLJOH UP
PS BTTFU DMBTT

60MJLF TIBSFT PG UZQJDBM PQFO FOE NBOBHFNFOU JOWFTUNFOU
EFTJHOFE UP CF USBEFE UISPVHIPVU UIF USBEJOH EBZ BOE CPVHIU BO
DBO USBEF BU FJUIFS B QSFNJVN PS EJTDPOU UP OFU BTTFU WBMVF
USBEJOH EBZ BOE BO BQQSPYJNBUJPO PG BDUVBM OFU BTTFU WBMVF
PS MPTF WBMVF EFQFOEJOH PO UIF QFSGPSNBODF PG UIF 6OEFSMZJOH
NBZ JOWFTU JO &5'T UIBU EP OPU IBWF UIJT TBNF MFWFM PG USBOTQBS
EJTDPOU PS QSFNJVN UP BDUVBM OFU BTTFU WBMVFT

(BJOT PS MPTTFT PO UIF 'VOE T JOWFTUNFOU JO &5'T XJMM VMUJN
BDUJWF USBEJOH NBSLFU GPS BO &5' T TIBSFT NBZ OPU EFWFMPQ PS C
MJTUJOH FYDIBOHF T PGGJDBMT EFFN TVDI BDUJPO BQQSPQSJBUF UIF
XJEF IDJSDVJU CSFBLFSTW XIJDI BSF UJFE UP MBSHF EFDSFBTFT JOTU
&5' XJMM CF SFEVDFE CZ USBOTBDUJPO BOE PUIFS FYQFOTFT JODMVEJ
FMJHJCMF UP SFDFJWF UIFJS QPSUJPO PG JODPNF JG BOZ BDDVNVMBU
UIF &5'

"O JOWFTUNFOU JO BO &5' JOWPMWFT SJTLT TJNJMBS UP JOWFTUJ
WBMVF PG UIF 6OEFSMZJOH "TTFUT NBZ GMVDUVBUF JO BDDPSEBODF XJ
TFDVSJUJFT BOE PUIFS GJOBODJBM JOTUSVNFOUT HFOFSBMMZ BOE PU

*G BO &5' JT B SFHJTUFSFE JOWFTUNFOU DPNQBOZ BT EFGJOFE JO
BCJMJUZ UP QVSDIBTF TFDVSJUJFT JTTVFE CZ PUIFS JOWFTUNFOU DPNQ
FYFNQUJWF SFMJFG)PXFWS VOEFS 3VMF E UIF 'VOE NBZ JOWFTU
UIFTF MJNJUT TVCKFDU UP DFSUBJO DPOEJUJPO 5IFTF SFTUSJDUJPO
4PNF &5'T BSF OPU TUSVDUVSFE BT JOWFTUNFOU DPNQBOJFT BOE UIVT

'PSFJHO 4FDVSJUJFT

5IF SJTLT PG JOWFTUJOH JO TFDVSJUJFT PG OPO 6 4 JTTVFST PS JT
SFMBUFE BNPOH PUIFS UIJOHT UP J EJGGFSFODFT JO TJ[F MJRVEJU
TFDVSJUJFT NBSLFUT PG DFSUBJO OPO 6 4 NBSLFUT DPNQBSFE UP UIF
GBDUPST BOE JJJ GPSFJHO FYDIBOHF NBUUFST TVDI BT SFTUSJDUJP
CFUXFFO UIF 6 4 EPMMBS BOE UIF DVSSFODJFT JO XIJDI UIF 'VOE T QP
SFHVMBUJPO BOE DPTUT BTTPDJBUFE XJUI DVSSFODZ FYDIBOHF 5IF Q
QBSUJDMBSMZ FNFSHJOH NBSLFUT BSF FYQFDUFE UP VOEFSDP TJHOJ
UIF TPDJBM QPMJUJDBM BOE FDPOPNJD TUBCJMJUZ DIBSBDUFSJTUJD P

6OBOUJJDJBUFE QPMJUJDBM PS TPDJBM EFWFMPQNFOU NBZ BGGFD
FDPOPNJFT BOE TFDVSJUJFT BOE DVSSFODZ NBSLFUT PG NBOZ FNFSHJO
5IFSF DBO CF OP BTTVSODFT UIBU UIFTF FDPOPNJD BOE NBSLFU EJTSV

-FHBM SFNFEJFT BWBJMBCMF UP JOWFTUPST JO DFSUBJO GPSFJHO D
JO UIF 6 4 PS PUIFS GPSFJHO DPOUSJFT "DDPVOUJOH TUBOEBSET JO
4UBUFT *G UIF BDDPVOUJOH TUBOEBSET JO BOPUIFS DPOUSZ EP OPU
IBSEFS GPS UIF QPSUGPMJP NBOBHFS UP DPNQMFUFMZ BOE BDDVSBUFM
(PWFSONFOU IBT GSPN UJNF UP UJNF JO UIF QBTU JNQPTFE SFTUSJDUJ
6 4 JOWFTUPST TVDI BT UIF 'VOE "MTP CSPLFSBHF DPNNJTTJPOT BOE
GPSFJHO DPOUSJFT UIBO UIFZ BSF JO UIF 6 4 5IJT SFEVDFT UIF BNPV

5IF 'VOE HFOFSBMMZ IPMET JUT GPSFJHO TFDVSJUJFT BOE DBTI JO
BOE TFDVSJUJFT EFQPTJUPSJFT NBZ CF SFDFOUMZ PSHBOJ[FE PS OFX U
OP SFHVMBUPSZ PWFSTJHIU PWFS UIFJS PQFSBUJPO "MTP UIF MBXT P

TFDVSJUJFT IFME CZ PS UP CF USBOTGFSSFE UP UIF 'VOE 'VSUIFSNPSF
JOBFRVBUF UP NFFU UIF 'VOE T DMBJNT JO BOZ PG UIFTF FWFOUT

*OGMBUJPO BOE SBQJE GMVDUVBUJPOT JO JOGMBUJPO SBUFT IBWF
FDPOPNJFT BOE TFDVSJUJFT NBSLFUT PG DFSUBJO FNFSHJOH NBSLFUT
OVNCF S PG DPSSFUDUJWF NFDIBOJTNT UP SFEVDF JOGMBUJPO PS NJUJH
CPUI PO FNFSHJOH NBSLFU FDPOPNJFT BOE UIFJS TFDVSJUJFT NBSLFUT
DPVOUSJFT IBWF FYQFSJFODFE TUFBEZ EFWBMVBUJPOT SFMBUJWF UP
DPVOUSJFT &DPOPNJFT JO FNFSHJOH NBSLFUT HFOFSBMMZ BSF IFBWJ
BOE NBZ DPOUJOVF UP CF BGGFDUFE BEWFSTFMZ CZ FDPOPNJD DPOEJU
SFMBUJWF DVSSFODZ WBMVFT BOE PUIFS QSPUFDUJPOJTU NFBTVSFT JN

#FDBVTF PG UIF IJHI MFWFMT PG GPSFJHO EFOPNJOBUEFE EFCU PXF
FYDIBOHF SBUFT DBO TJHOJGJDBOUMZ BGGFDU UIF EFCU TFSWJDF PCM
SBUFT QSPGJU NBESHJOT BOE FYQPSUT XIJDI BSF B NBKPS TPVSDF PG

5P UIF FYUFOU BO FNFSHJOH NBSLFU DPVOUSZ GBDFT B MJRVJEJU
JODSFBTF SFTUSJDUJPOT PO UIF PVUGMPX PG BOZ GPSFJHO FYDIBOHF

BQQSPQSJBUF DJSDVNTUBODFT XBSSBOU JU NBZ BQQMZ UP UIF 4&\$ GP
4FDUJPO F PG UIF "DU %VSJOH UIF QFSJPE DPNNFODJOH GSPN U
4&\$ BDUJPO UIF QPSUGPMJP TFDVJSUJFT JO UIF BGGFDUFE NBSLFUT X
BDDPSEBODF XJUI UIF 'VOE T WBMVBUJPO QPMJDZ

"MUIPVHI JU NJHIU CF UIFPSFUJDBMMZ QPTTJCMF UP IFEHF GPS BO
OBUVSF PG UIF SJTLT BTTPDJBUFE XJUI FNFHSHOH NBSLFU JOWFTUJOH
EJGGJDVMU UP IFEHF FGGFDUJWFMZ BHBJOTU TVDI SJTLT

&VSPQF — 3FDFOU &WFOU

" OVNCFS PG DPVOUSJFT JO &VSPQF IBWF FYQFSJFODFE TFWFSF F
JTTVFST BOE FWFO DFSUBJO HPWFSONFOUT IBWF EFGBVMUFE PO PS
GBDFE EJGGJDVMUJFT PCUBJOJOH DSFEJU PS SFGJOBODJOH FYJTUJOH
HPWFSONFOU PS DFOUSBM CBOL TVQQPSU IBWF OFFEFE UP SBJTF DBQ
GJOBODJBM NBSLFUT JO &VSPQF BOE FMTFXIFS IBWF FYQFSJFODFE FY
EJGGJDVMUJFT NBZ DPOUJOVF XPSTFO PS TQSFBE XJUIJO BOE PVUTJE
HPWFSONFOUT DFOUSBM CBOLT BOE PUIFST JODMVEJOH BVTUFSJUZ N
NBZ MJNJU GVUVSF HSPXUI BOE FDPOPND SFDPWFSZ PS IBWF PUIFS VC
HPWFSONFOUT BOE PUIFST PG UIFJS EFCU DPVME IBWF BEEJUJPOBM BE
BSPVOE UIF XPSME

*O BEEJUJPO UIF 6OJUFE ,JOHEPN MFGU UIF &VSPQFBO 6OJPO PO
'PMMPXJOH B USBOTJUJPO QFSJPE UIF 6OJUFE ,JOHEPN T QPTU #SFYJU
%FDFNCFS XBT QSPWJTJPOBMMZ BQQMJFE FGGFDUJWF +BOVBSZ
TJHOJGJDBOU NBSLFU VODFSUBJOUZ SFHBSEJOH #SFYJU T SBNJGJDBUJ
SFHVMBUPSZ FDPOPND BOE NBSLFU PVUDPNFT DBOOPU CF GVMMZ LO
WPMBUJMJUJUZ BOE JMMJRVJEJUZ BOE MPXFS FDPOPND HSPXUI GPS DPN
BOE SFWFOVFT 5IF 6OJUFE ,JOHEPN IBT POF PG UIF MBSHFTU FDPOPND
6OJPO DPVOUSJFT BOE UIF 6OJUFE 4UBUFT #SFYJU NBZ DSFBUF BEEJU
JODMVEJOH B DPOUSBDUJPO PG UIF 6OJUFE ,JOHEPN T FDPOPND EFDSP
XFMM BT B EFDSPBTF JO CVTJOFTT BOE DPOTVNFS TQFOEJOH BOE JOWF
PUIFS &VSPQFBO FDPOPNDJFT CVU BMTU UIF CSPBEFS HMPCBM FDPOPND
XJUIESBX GSPN UIF &VSPQFBO 6OJPO BOE PS BCBOEPO UIF FVSP UIF D
JO &VSPQF IBWF TVGGFSFE UFSSPS BUUBDLT BOE BEEJUJPOBM BUUBDL
NJHSBUJPO GSPN UIF .JEEMF &BTU BOE "GSJDB

5IF VMUJNBUF FGGFDUT PG UIFTF WFOU BOE PUIFS TPDJP QPMJU
BGGFDU HMPCBM FDPOPNDJFT BOE NBSLFUT 8IFUIFS PS OPU UIF 'VOE JO
TJHOJGJDBOU FYQPTVSF UP &VSPQFBO JTTVFST PS DPVOUSJFT UIFTF F
JOWFTUNFOU

3JTLT 3FMBUFE UP 3VTTJB T *OWBTJPO PG 6LSBJOF

3VTTJB T NJMJUBSZ JOWBTJPO PG 6LSBJOF JO 'FCSVBSZ UIF S
DPVOUSJFT BOE UIF QPUFOUJBM GPS XJEFS DPOGMJDU DPVME JODSFB
BGGFDU SFHJPOBM BOE HMPCBM FDPOPNDJFT 5IF 6OJUFE 4UBUFT BOE P
3VTTJB DFSUBJO 3VTTJB JOEJWJEVBMT CBOLJOH FOUJUJFT BOE DPS
BOE NBZ JNQPTF TBODUJPO POT PUIFS DPVOUSJFT UIBU QSPWJEF NJMJ
BDUJPO JODMVEJOH QSFWFOUJOH SFQBUSJBUJPO PG DBQJUBM CZ 6 4
NBSLFU EJTSVQUJPO JODMVEJOH JO DFSUBJO NBSLFUT JOEVTUSJFT I
OFHBUJWFMZ BGGFDUFE HMPCBM TVQQMZ DIBJOT GPPE TVQQMJFT JOG
BDUJPO BOE UIF SFQFSVTTJPO POT PG TVDI BDUJPO JODMVEJOH BOZ T
BUUBDLT BSF JNQPTTJCMF UP QSFEJDU 5IFTF BOE BOZ SFMBUFE FWFO
PG BO JOWFTUNFOU JO UIF 'VOE FWFO JG UIF 'VOE EPFT OPU IBWF EJS
BGGFDUFE CZ UIF JOWBTJPO

&VSPEPMMBS PS :BOLFF 0CMJHBUJPOT

&VSPEPMMBS CBOL PCMJHBUJPOT BSF 6 4 EPMMS EFOPNJOBUE
OPO 6 4 CSBODIFT PG 6 4 CBOLT BOE CZ OPO 6 4 CBOLT :BOLFF PCM
6 4 DBQJUBM NBSLFUT CZ OPO 6 4 JTTVFST &VSPEPMMBS BOE UP B M
SJTLT 0OF TVDI SJTL JT UIF QPTTJCJMJUZ UIBU B OPO 6 4 HPWFSONFO
BDSPTT JUT CPSEFST 0UIFS SJTLT JODMVEF BEWFSTF QPMJUJDBM BOE
PG HPWFSONFOU SFHVMBUJPO PG GJOBODJBM NBSLFUT BOE JOTUJUVUJ
OBUJPOBMJ[BUJPO PG OPO 6 4 JTTVFST

4PWFSFJHO (PWFSONFOU BOE 4VQSB0BUJPOBM %FCU 0CMJHBUJPOT

5IF 'VOE NBZ JOWFTU JO BMM UZQFT PG EFCU TFDVSJUJFT PG HPW
5IFTF TPWFSFJHO EFCU TFDVSJUJFT NBZ JODMVEF EFCU TFDVSJUJFT J
JOTUSVNF0UBMJUJFT BOE QPMJUJDBM TVCEJWJTJPOT MPDBUFE JO FNF
DPOUSPMMFE PS TQPOTPSFE FOUJUJFT MPDBUFE JO FNF0SHJOH NBSLFU
JOWFTUNFOU DIBSBDUFSJTUJDT PG JOTUSVNF0UT JTTVFE CZ BOZ PG UI
HPWFSONFOUT BOE GJOBODJBM JOTUJUVUJPOT PS EFCU TFDVSJUJFT J
TVQSB0BUJPOBM FOUJUZ JT B CBOL DPNNJTJPO PS DPNQBOZ FTUBCM
PS NPSF DPVOUSJFT UP QSPNPUF SFDPOTUSVDUJPO PS EFWFMPQNFOU
&VSPQFBO 60JPO UIF &VSPQFBO *OWFTUNFOU #BOL UIF *OUFS "NFSJD
60JUFE /BUJPOT UIF 8PSME #BOL BOE UIF &VSPQFBO #BOL GPS 3FDPOT
OP UBYJOH BVUIPSJUZ BOE BSF EFQFOEFOU PO UIFJS NFNCFST GPS QBZ
NPSF NFNCFST PG B TVQSB0BUJPOBM PSHBOJ[BUJPO XJMM DPOUJOVF U
UIF PSHBOJ[BUJPO NBZ CF VOBCMF UP QBZ JOUFSFTU PS SFQBZ Q0JODJ
JOWFTUNFOUT 'VSUIFS UIF MFOEJOH BDUJWJUJFT PG TVDI FOUJUJFT B
JODPNF

4PWFSFJHO EFCU JT TVCKFDU UP SJTLT JO BEEJUJPO UP UIPTF SFM
UIF JTTVJOH HPWFSONFOU NBZ CF JNNVOF GSPN MBXTVJUT JO UIF FWF
EFCUPS T XJMMJOHOFTT PS BCJMJUZ UP SFQBZ JO B UJNFMZ NBOOFS N
FYUFOU PG JUT OPO 6 4 DVSSFODZ SFTFSWFT UIF BWBJMBCJMJUZ PG
SFM0UJWF TJ[F PG UIF EFCU TFSWJDF CVSEFO UP UIF FDPOPZ BT B XI
MFOEFST BOE UIF QPMJUJDBM DPOTUSBJOUT UP XIJDI UIF TPWFSFJHO E
EJTCVSTFNFOU PS BTTJTUBODF GSPN OPO 6 4 HPWFSONFOUT PS NVMU
JOUFS0BUJPOBM DSFEJUT BOE UIF DPVOUSZ T CBMBODF PG USBEF "TT
BVTUFSJUZ NFBTVSFT BOE SFGPSNT FDPOPND QFSGPSNBODF BOE PS U
JNQMFNFOU TVDI SFGPSNT BDIJFWF TVDI MFWFMT PG FDPOPND QFSGP
DBODFMM0UJPO PG TVDI UIJSE QBSUJFT DPNNJUNFOU UP MFOE GVOET
BCJMJUZ PS XJMMJOHOFTT UP TFSWJDF JUT EFCUT JO B UJNFMZ NBOOF

%FQPTJUBSZ SFDFJQUT JO HFOFSBM BSF TVCKFDU UP NBOZ PG UIF
NBSLFU JMMJRVJEJUZ DVSSFODZ QPMJUJDBM JOGPSNBUJPO BOE PUI
SJTL JG UIF VOEFMZHJH TFDVSJUZ JT USBEFE JO B GPSFJHO DVSSFOD
QBSUJDJQBUJPO PG UIF JTTVFS PG UIF VOEFMZHJH GPSFJHO TFDVSJU
UIFSF JT XJUI SFTQFDU UP EPNFTUJD DPNQBOJFT BOE JTTVFST PG TFDV
JOGPSNBUJPO BWBJMBCMF UIFSF NBZ OPU CF B DPSSFMBUJPO CFUXFF

)JHI :JFME i+VOLw #POET

)JHI ZJFME TFDVSJUJFT BSF NFEJVN PS MPXFS SBUFE TFDVSJUJFT B
SFGFSSFE UP BT iIJHI ZJFMEw PS iKVOLw CPOET (FOFSBMMZ TVDI TFDV

QBSUJDJ UIF GFNVQ@SNPCTFJQC NBTUQcF ðpPO@OJTPDVSDT PGDQ€UGOH P

3FTUSJDUF E TFDVSJUJFT NBZ CF TPME POMZ QVSTVBOU UP 4&\$
USBOTBDUJPOT PS JO QVCMJD PGGFSJOHT XJUI SFTQFDU UP XIJDI B

JOWFTU JO PUIFS JOWFTUNFOU DPNQBOJFT UP UIF FYUFOU EFTJSFE *O
PUIFS JOWFTUNFOU MJNJUBUJPOT PS SFEFNQUJPO SFTUSJDUJPOT XIJDI
XJUI SFT LJOH

HPWFSONFOU *TTVFST PG TVDI TFDVSJUJFT JODMVEF 'BOOJF .BF GPSN
'SFEEJF .BD GPSNBMMZ LOPXO BT UIF 'FEFSBM)PNF -PBO .PSUHBHF \$P
DPSQPSBUJPO XIJDI JT TVCKFDU UP HFOFSBM SFHVMBUJPO CZ UIF 4FDS
JTTVFE CZ 'BOOJF .BF BSF HVBSBOUFFE BT UP UJNFMZ QBZNFUO PG QS
TUPDLIPMEFS PXOFE DPSQPSBUJPO DIBSUFSE CZ \$POHSFTT BOE TVCKF
%FWFMPQNFOU 1BSUJJDJQBUJPO DFSUJGJDBUFT SFQSFTFOUJOH JOUFSF
BT UP UIF UJNFMZ QBZNFUO PG JOUFSFTU BOE VMUJNBUF DPMMFDUJPO
GJOBODJBM TVQQPSU UP 'BOOJF .BF BOE 'SFEEJF .BD JO UIF QBTU CVU
HPWFSONFOU TQPOTPSFE FOUJUJFT JO UIF GVUVSF

Privately issued MBS 6OMJLF .#4 JTTVFE PS HVBSBOUFFE CZ UIF 6 4 HPWFSON
FOUJUJFT .#4 JTTVFE CZ QSJWBUF JTTVFST EP OPU IBWF B HPWFSONFO
DSFEJU FOIBODFNFOU QSPWJEFE CZ FYUFSOBM FOUJUJFT TVDI BT CBOL
USBOTBDUJPO JUTFMG

*O BEEJUJPO .#4 UIBU BSF JTTVFE CZ QSJWBUF JTTVFST BSF OPU
NPSUHBHFT UIBU BSF BQQMJDBCMP UP UIPTF .#4 UIBU IBWF B HPWFSON
NPSUHBHF MPBOT VOEFMZJJOH QSJWBUF .#4 NBZ BOE GSFRVFOUMZ EP
DIBSBDUFSJTUJDT UIBO HPWFSONFOU PS HPWFSONFOU TQPOTPSFE .#4
SBUF UFSN TJ[F QVSQPTF BOE CPSSPXFS DIBSBDUFSJTUJDT 1SJWBUF
MPBO UP WBMVF NPSUHBHFT BOE NBOVGBDUVSFE IPVVTJOH MPBOT 5IF D
QSJWBUF MBCFM .#4 QPPM NBZ WBSZ UP B HSFBUS FYUFOU UIBO UIPTF
JODMVEF TVCQSJNF NPSUHBHF MPBOT 4VCQSJNF MPBOT SFGFS UP MPB
MPXFS DBQBDJUZ UP NBLF UJNFMZ QBZNFOUT PO UIFJS MPBOT 'PS UIF
NBOZ DBTFT IJHIFS EFGVMU SBUFT UIBO UIPTF MPBOT UIBU NFFU HPWF

1SJWBUFMZ JTTVFE NPSUHBHF CBDLFE TFDVSJUJFT BSF OPU USBEF
TFDVSJUJFT FTQFDJBMMZ XIFO UIFSF JT B QFSDFJWFE XFBLOFTT JO UI
USBEJOH NBSLFU NPSUHBHF CBDLFE TFDVSJUJFT IFME JO UIF 'VOE T Q
DPNQMFYJUJFT JOWPMWFE JO BTTFTTJOH UIF WBMVF PG UIF VOEFMZJJO

Adjustable rate mortgage-backed securities "EKVTUBCMF SBUF NPSUHBHF CBDLFE TFDVS
TFDVSJUJFT DPMMBUFSBMJ[FE CZ NPSUHBHFT XJUI BEKVTUBCMF SBUIFS
B NPSUHBHF QPPM HFOFSBMMZ QSPWJEF GPS B GJYFE JOJUJBM NPSUHB
"GUFU UIBU TDIFEVMF PG QBZNFOUT IBT CFFO DPNQMFUFE UIF JOUFSF
BEKVTUNFOU CBTFE PO DIBOHFT UP B EFTJHOBUE CFODINBSL JOEY

.PSUHBHFT VOEFMZJJOH NPTU "3.#4 NBZ DPOUBJO NBYJNVN BOE N
SBUF NBZ OPU WBSZ PWFS UIF MJGFUJNF PG UIF NPSUHBHF *O BEEJUJ
MJNJUBUJPO POT PO UIF NBYJNVN BNPVOU CZ XIJDI UIF NPSUHBHF JOUFSF
FWFOU UIBU NBSLFU SBUFT PG JOUFSFTU SJTF NPSF SBQJEMZ UP MFWF
VOEFMZJJOH BO "3.#4 UIF "3.#4 DPVQPO NBZ SFQSFTFOU B CFMPX NBS
WBMVF PG UIF "3.#4 XJMM MJLFMZ IBWF GBMMFO %VSJOH QFSJPET PG
SBUF NPSUHBHFT UIBU SFNBJO JO UIF NPSUHBHF QPPM VOEFMZJJOH UI
NPSUHBHFT XIJDI XJMM SFNBJO DPOTUBOU "EKVTUBCMF SBUF NPSUHB
SBUFT EFDMJOF UIBO EP GJYFE SBUF JOWFTUNFOUT *O BEEJUJPO UIF
EVSJOH JOUFSJN QFSJPET CFUXFFO DPVQPO SFTFU EBUFT

Stripped mortgage-backed securities 4USJQQFE NPSUHBHF CBDLFE TFDVSJUJFT i4.#4
DMBTTFT PG TFDVSJUJFT UIBU SFDFJWF EJGGFSFOU QSPQPSUJPO PG U
DPNNPO UZQF PG 4.#4 XJMM IBWF BU MFBTU POF DMBTT SFDFJWJOH PO
DMBTT XJMM SFDFJWF BMM PG UIF JOUFSFTU i*0w PS JOUFSFTU POMZ D
QSJODJQBM POMZ DMBTT 5IF ZJFME UP NBUVSJUZ PO *0T 10T BOE PUI
QSFNJVN PS EJTDPOU HFOFSBMMZ BSF FYUSFNFMZ TFOTJUJWF OPU PO
QSJODJQBM QBZNFOUT JODMVEJOH QSFQBZNFOUT PO UIF SFMBUFE VO

NBZ IBWF B NBUFSJBM BEWFSTF FGGFDU PO TVDI TFDVSJUJFT ZJFME U
UIBO BOUJJDJQBUFE QSFQBZNFOUT PG QSJODJQBM UIF 'VOE NBZ GBJM U
TFDVSJUJFT IBWF SFDFJWFE UIF IJHIFTU SBUJOH CZ B /3430

4.#4 IBWF HSFBUFS WPMBUJMJUZ UIBO PUIFS UZQFT PG TFDVSJUJF
JOWFTUPST UISPVHI TFWFSBM JOWFTUNFOU CBOLJOH GJSNT BDUJOH BT
GVMMZ EFWFMPQFE "DDPSEJOHMZ UIF TFDPOEBSZ NBSLFU GPS 4.#4 NE
.#4 QPUFOUJBMMZ MJNJUJOH UIF 'VOEhT BCJMJUZ UP CVZ PS TFMM 4.#4

Collateralized mortgage obligations "OPUIFS UZQF PG TFDVSJUJZ SFQSFTFOUJOH BO
LOPXO BT B DPMMBUFSBMJ[FE NPSUHBHF PCMJHBUJPO i\$.0w \$.0T SFQ
UFSN QPSUJPO PG B NPSUHBHF QPPM &BDI QPSUJPO PG UIF QPPM SFDF
UISPVHI UP UIF TIPSU UFSN \$.0 GJSTU BOE UP UIF MPOH UFSN \$.0 MBTU
SBUF PG QSJODJQBM SFQBZNFOUT \$.0T BSF JTTVFE CZ QSJWBUF JTTVF
'BOOJF .BF BOE 'SFEEJF .BD *OWFTUNFOUT JO \$.0T BSF TVCKFDU UP UI
NPSUHBHF CBDLFE TFDVSJUJFT *O BEEJUJPO JO UIF FWFU PG B CBOL
'VOE UIF 'VOE DPVME FYQFSJFODF EFMBZT JO MJRVJEBUJOH CPUI JUT
DBUFHPSZ PG UIF SFDPHOJ[FE SBUJOH TFSWJDFT BOE NBZ JOWFTU JO V
SFQSFTFOU POMZ UIF JODPNF QPSUJPO PS UIF QSJODJQBM QPSUJPO PG

"EEJUUPOBMMZ BO BTTFU CBDLFE TFDVSJUZ JT TVCKFDU UP SJTLT
QFSGPSNBODF 'PS FYBNQMF B TFSWJDJOH BHFOU PS PSJHJOBUPS T N
F H GBJMVSF UP QSPQFSMZ EPDVNFOU B TFDVSJUZ JOUFSFTU JO UIF
BOE UP UIF VOEFMZZJOH DPMMBUFSBM

Asset-backed commercial paper: 5IF 'VOE NBZ QVSDIBTF DPNNFSDJBM QBQFS JODM

BTTDPDJBUFE XJUI GJYFE JODPNF TFDVSJUJFT EJTDVTTFE FMTFXIFSF JO
SJTL \$%0T DBSSZ BEEJUJPOBM SJTLT JODMVEJOH CVU OPU MJNJUFE U
CF BEFRVBUF UP NBLF JOUFSFTU PS PUIFS QBZNFOUT JJ UIF DPMMBU
EPXOHSBEFE JG SBUFE CZ B OBUJPOBMMZ SFDPHOJ[FE TUBUJTUJDBM S
BSF TVCPSEJOBUP UP PUIFS USBODIFT JW UIF DPNQMFY TUSVDUVSF P
BOE NBZ QSPEVDF EJTVUFT XJUI UIF JTTVFS PS VOFYQFDUFE JOWFTUN

'PSXBSE 3PMM 5SBOTBDUJJPOT

*O B GPSXBSE SPMM USBOTBDUJPO BMTPL OXO BT B NPSUHBHF E
BOE TJNVMUBOFVMTZ DPOUSBDUT UP SFQVSDIBTF TVCTUBOUJBMMZ TJ
EBUF 5IF 'VOE NBZ FOUFS JOUP B GPSXBSE SPMM USBOTBDUJPO DPNNJ
XIFSFCZ SBUIFS UIBO BDDFQUJOH EFMJWFSZ PG UIF TFDVSJUJZ PO UIF
UP SFQVSDIBTF B TJNJMBS TFDVSJUJZ BU B MBUFS UJNF *O UIJT DBTF
DPNQFOTBUFE CZ UIF JOUFSFTU FBSOFE PO UIF DBTI QSPDFFET PG UIF
TBMF QSJDF BOE UIF MPXFS SFQVSDIBTF QSJDF BU UIF GVUVSF EBUF

'PSXBSE SPMM USBOTBDUJJPOT JOWPMWF UIF SJTL UIBU UIF NBSLFU
VOEFS UIF BHSFFNFOU NBZ EFDMJOF CFMPX UIF SFQVSDIBTF QSJDF *O
USBOTBDUJPO GJMFT GPS CBOLSVQUDZ PS CFDPNFT JOTPMWFOU UIF 'V
QFOEJOH B EFUFSNJOBUP CZ UIF PUIFS QBSUZ PS JUT USVTUFF PS S
TFDVSJUJFT

'PSXBSE SPMM USBOTBDUJJPOT NBZIBWF B MFWFSBHJOH FGGFDU P
NPSF WPMBUJMF BOE JODSFBTJOH UIF 'VOE T PWFSBMM JOWFTUNFOU F
UIF QPSUGPMJP NBOBHFS T BCJMJUJZ UP DPSSFDMZ QSFEJDU JOUFSFTU
USBOTBDUJJPOT DBO CF TVDDFTTGVMZ FNQMPZFE

1SFGFSSFE 4FDVSJUJFT

5IFSF BSF UXP CBTJD UZQFT PG QSFGFSSFE TFDVSJUJFT USBEJUJ

3FQVSDIBTF "HSFFNFOUT

6OEFS UIF UFSNT PG B UZQJDBM SFQVSDIBTF BHSFFNFOUT UIF 'VOE
B DPVOUFSQBSUZ UZQJDBMMZ B CBOL PS B CSPLFS EFBMFS TVCKFDU
UIF TFDVSJUUJFT BU BO BHSFFE VQPO UJNF BOE QSJDF 5IF 'VOE NBZ FO
DPOTJTUT FOUJSFMZ PG DBTI JUFNT BOE PS TFDVSJUUJFT PG UIF 6 4 (P
TQPOTPSFE FOUFSQSJTFT 5IF 'VOE NBZ BMTP FOUFS JOUP SFQVSDIBTF
UZQFT PG TFDVSJUUJFT JODMVEJOH TFDVSJUUJFT UIF 'VOE DPVME OPU Q
TFDVSJUUJFT XIJDI TFSWF BT DPMMBUFBSBM NBZ JODMVEF CVU BSF OPU
DPSQPSBUF EFCU PCMJHBUJPOT BTTFU CBDLFE TFDVSJUUJFT JODMVEJO
TFDVSJUUJFT BOE DPNNPO BOE QSFGFSSFE TUPDL BOE NBZ CF PG CFMPX
HSFBUSF UIBO UIF QVSDIBTF QSJDF QBJE CZ UIF 'VOE UIFSFCZ EFUFSN
NBZ CF USFBUFE BT B TFDVSFE MPBO XIFSF UIF 'VOE MPBOT DBTI UP U
TFDVSJUUJFT BT DPMMBUFBSBM "MM SFQVSDIBTF BHSFFNFOUT FOUFSFE J
EVSJOH UIF UFSN PG B SFQVSDIBTF BHSFFNFOUT UIF WBMVF PG UIF VOE
SFQVSDIBTF QSJDF "MTP UIF 'VOE PS JUT DVTUPEJBO JT SFRVJSFE UP
CFMJFWFT XJMM HJWF UIF 'VOE B WBMJE QFSGFDUFE TFDVSJUJZ JOUFS

3FQVSDIBTF BHSFFNFOUT DPVME JOWPMWF DFSUBJO SJTLT JO UIF
QPTTJCMF EFMBZT PS SFTUSJDUJPOT VQPO UIF 'VOE T BCJMJUZ UP EJT
WBMVF PG UIF VOEFMZJOH TFDVSJUUJFT EVSJOH UIF QFSJPE JO XIJDI U
B MJNJUFE NBSLFU PS OP NBSLFU GPS EJTQPTJUJPO PG TVDI VOEFMZJ
BTTFSUJOH UIPTF SJHIUT BOE UIF SJTL PG MPTJOH BMM PS QBSU PG UI
SJTLT CVU UIFS JT OP HVBSBOUFF UIBU TVDI FGGPSUT XJMM CF TVDDF
TFDVSJUUJFT UIF 'VOE DPVME OPU QVSDIBTF EJSFDUMZ BOE UIF DPVOU
TFDVSJUUJFT 3FQVSDIBTF BHSFFNFOUT DPMMBUFBSBMJ[FE CZ TFDVSJUJF
SJTLT BOE BSF NPSF MJLFMZ UP IBWF B UFSN UP NBUVSJUJZ PG MPOHFS
UIBO TFWFO EBZT BSF DPOTJEFSFE UP CF JMMJRVJE

3FQVSDIBTF BHSFFNFOUT NBZ CF FOUFSFE JOUP PS OPWBUFE XJUI
DPVOUFSQBSUZ 5IF 'VOE XPVME UIFO CFDPNF TVCKFDU UP UIF SVMFT
SFNFEJFT JODMVEJOH SFDPVSTF UP DPMMBUFBSBM PS EFMBZ PS SFTUS

UIF QSPDFFET PG B SFWFSTF SFQVSDIBTF BHSFFNFOU JO PUIFS TFDVSI
NBSLFU WBMVF PG UIF TFDVSJUIJT JO XIJDI UIF QSPDFFET BSF JOWFTU
JOWFTUNFOU JO UIF 'VOE NPSF WPMBUJMF BOE JODSFBTFT UIF 'VOE T F
JOWFTUNFOU PG UIF QSPDFFET PG UIF SFWFSTF SFQVSDIBTF BHSFFNFOU
UP QBZ VOEFS UIF SFWFSTF SFQVSDIBTF BHSFFNFOU FOHBHJOH JO UIF

8IFO UIF 'VOE FOUFST JOUP B SFWFSTF SFQVSDIBTF BHSFFNFOU J
NBZ GJMF GPS CBOLSVQUDZ CFDPNF JOTPMWFOU PS PUIFSXJTF EFGVM
DPVOUFSQBSUZ UIFS NBZ CF EFMBZT DPTUT BOE SJTLT PG MPTT JOW
UIPTF SJHIUT NBZ CF MJNJUFE CZ PUIFS DPOUSBDUVBM BHSFFNFOUT PS

*O BEEJUJPO UIF 'VOE NBZ CF VOBCMF UP TFMM UIF JOTUSVNFOUT
XIFO JU XPVME CF BEWBOUBHFPVT UP EP TP PS NBZ CF SFRVJSFE UP M
EJTBEWBOUBHFPVT UP EP TP JO PSEFS UP NBLF QBZNFOUT XJUI SFTQFD
DPVME BEWFSTFMZ BGGFDU UIF 'VOE T TUSBUFHZ BOE SFTVMU JO MPXF

5IF 'VOE XJMM USFBU SFWFSTF SFQVSDIBTF BHSFFNFOUT BOE TJNJ
4FDUJPO PG UIF "DU CZ NBJOUBJOJOH BTTFU DPWFSBHF PG BU MF
USBOTBDUJPO GPS QVSQPTFT PG 3VMF G JODMVEJOH BT BQQMJDB

4FDVSJUIJT -FOEJOH

5IF 'VOE NBZ MFOE JUT QPSUGPMJP TFDVSJUIJT QSPWJEFE UIBU D
NBSLFU WBMVF PG TVDI TFDVSJUIJT JT DPOUJOVPVTMZ NBJOUBJOFE C
USBOTBDUJPO UIF PUIFS QBSUZ XJMM QBZ UIF 'VOE BO BNPVOU FRVJW
'VOE NBZ JOWFTU UIF DBTI DPMMBUFSBM BOE FBSO BEEJUJPOBM JODPN
UIF PUIFS QBSUZ XIP IBT EFMJWFSFE FRVJWBWFOU DPMMBUFSBM 5IFTF
UIF PUIFS QBSUZ 5IF 'VOE NBZ QBZ BENJOJTUSBUJWF BOE DVTUPEJBM
OFHPUJBUFE QPSUJPO PG UIF JOUFSFTU FBSOFE PO UIF DBTI PS FRVJW
"MUIPVHI WPUJOH SJHIUT PS SJHIUT UP DPOTFOU XJUI SFTQFDU UP UIF
NBLF BSSBOHFNFOU UP WPUF PS DPOTFOU XJUI SFTQFDU UP B NBUFSJ
TFDVSJUIJT JODMVEF QPTTJCMF EFMBZT JO SFDPWFSJOH PS UIF GBJMV
TIPVME UIF CPSSPXFS GBJM GJOBODJBMMZ 5IF 'VOE SVOT UIF SJTL UIB
PCMJHBUJPO BOE UIBU UIF WBMVF PG UIF DPMMBUFSBM SFDFJWFE NBZ
DPMMBUFSBM BOE JOWFTUT UIBU DBTI UIF 'VOE JT TVCKFDU UP UIF SJT
JU UP UIF DPVOUFSQBSUZ 4VCKFDU UP UIF GPSFHPJOH MPBOT PG GVO
FDPOPJND DIBSBDUFSJTUJDT TJNJMBS UP SFWFSTF SFQVSDIBTF BHSFFN
MFOEJOH BMUIPVHI JU NBZ FOHBHF JO USBOTBDUJPO TVDI BT SFWFS

4IPSU 4BMFT

4IPSU TBMFT BSF USBOTBDUJPO JO XIJDI UIF 'VOE TFMMT B TFDVS
WBMVF PG UIF TFDVSJUZ BMTF LOPXO BT IOBLFEW TIPSU TBMFT 5P NB
'VOE JT UIF PCMJHBUFE UP SFQMBDF UIF CPSSPXFE TFDVSJUZ CZ QVS
SFQMBDFNFOU 5IF QSJDF BU TVDI UJNF NBZ CF NPSF PS MFTT UIBO UIF
UIF TFDVSJUZ JT FOUJUMFE UP SFUBJO UIF QSPDFFET GSPN UIF TIPSU T
TFDVSJUZ 6OUJM UIF TFDVSJUZ JT SFQMBDFE UIF 'VOE JT SFRVJSFE U
TIBSFT TPME TIPSU 5P CPSSPX UIF TFDVSJUZ UIF 'VOE BMTF NBZ CF S
TFDVSJUZ TPME

5IF 'VOE XJMM SFBMJ[F B HBJO JG UIF QSJDF PG B TFDVSJUZ EFDM
UIF 'VOE QVSDIBTFT B TFDVSJUZ UP SFQMBDF UIF CPSSPXFE TFDVSJUZ
TFDVSJUZ JODSFBTFT CFUXFFO UIPTF EBUFT 5IF BNPVOU PG BOZ HBJO
QSFNJVN PS JOUFSFTU UIBU UIF 'VOE NBZ CF SFRVJSFE UP QBZ UIF MFC
SFUVSOFE UP UIF MFOEFS PO TIPSU OPUJDF *G UIF SFRVFTU GPS UIF S
TFDVSJUZ BSF SFDFJWJOH TJNJMBS SFRVFTUT B ITIPSU TRVFF[Fw DBO

UP UIF SJHIU PG QBZNFUO PG BOPUIFS DMBTT PG UIF TUSVDUVSFE OPU
VOTVCPSEJOBUE iTUSVDUVSFEW OPUFT

4VCPSEJOBUE 4FDVSJUUFT

4VCPSEJOBUE TFDVSJUUFT JODMVEF TFDVSJUUFT XIJDI BSF TVCPS
XIJDI SFQSFTFOU JOUFSFTUT JO QPPMT PG TVDI TVCPSEJOBUE PS KVO
iKVOLw CPOET J F CPOET UIBU BSF SBUFE CFMPX JOWFTUNFOU HSBEP

6 4 5SFBTVSZ 0CMJHBUJPOT

TFDVSJUUJFT XJUI XIJDI UIFZ XFSF JOJUJBMZ TPME 8BSSBOUT NBZ CF
WBMVF PG POF PS NPSF TQFDJGJFE JOEFYFT iJOEFY XBSSBOUTw *OEF
JOTUJUVUJPOT BOE HJWF UIF IPMEFS UIF SJHIU BU BOZ UJNF EVSJOH U

Pay-In-Kind Securities 1BZ JO LJOE TFDVSJUUJFT BSF CPOET XIJDI QBZ JOUFSFT
FRVJUJZ TFDVSJUUJFT 1BZ JO LJOE TFDVSJUUJFT IBWF DIBSBDUFSJTUJDT
TFDVSJUUJFT NBZ CF QBJE JO UIF GPSN PG PCMJHBUJPOT PG UIF TBNF U
LJOE CPOET BMTP DBSSZ BEEJUJPOBM SJTL BT IPMEFST PG UIFTF UZQF
QPSUJPO PG TVDI TFDVSJUUJFT JT TPME BOE JG UIF JTTVFS EFGBVMUT
QSJDF PG QBZ JO LJOE CPOET JT BGGFDUFE CZ JOUFSFTU SBUF DIBOHF
UIBU PG TFDVSJUUJFT XIJDI QBZ JOUFSFTU JO DBTI 4JNJMBS UP [FSP DF
IPMEFS PG QBZ JO LJOE CPOET UP BDDSVF JODPNF XJUI SFTQFDU UP UI
JUT RVBMJGJDBUJPO BT B SFHVMBUFE JOWFTUNFOU DPNQBOZ BOE BWP
SFRVJSFE UP EJTUSJCVUF JODPNF BDDSVFE XJUI SFTQFDU UP UIFTF TF

+BOF 5SVT 5SVTUFF 1SFT 4JODF 4FOJPS 7JDF 1:
#PSO \$IJFG &YFDVU #PBSE .BOBFN

"EEJUJPOBM 0GGJDFST

/BNF :FBS
#JSUI

BOE "EESF 1PTJUJPO T X.

5FSN PG 0G
BOE -FOHU
5JNF 4FSWF

1SJODJQBM 0DDVQBU.
%VSJOH UIF 1BTU 'JWF

5FE 1 #FDLFS
#PSO
'SBOLMJO 5FNQ

2VBMJGJDBUJPOT PG 5SVTUFFT #PBSE -FBEFSTIJQ 4USVDUVSF BOE

JOEFQFOEFOU HPWFSOBODF BOE PWFSTJHIU 5IF #PBSE BMTP IBT EFUF
#PBSE JT OPU BGGJMJBUFE XJUI 'SBOLMJO 5FNQMFUPO JT BQQSPQSJBU
PSEFSMZ BOE FGGJJDJFOU GMPX PG JOGPSNBUJPO CFUXFFO UIF *OEFQF

5IF "VEJU \$PNNJUUFF PWFSTFFT UIF TDPQF PG UIF 'VOE T BVEJU U
QSBDUJDF BT BOE JUT JOUFSOBM DPOUSPMT 5IF "VEJU \$PNNJUUFF BTTJT
JOUFHSJUZ PG UIF 'VOE T BDDPVOUJOH BVEJUJOH BOE GJOBODJBM SFC
JOEFQFOEFOU SFHJTUFSFE QVCMJD BDDPVOUJOH GJSN BOE UIF 'VOE T
\$PNNJUUFF BQQSPWFT BOE SFDPNNFOET UP UIF #PBSE GPS SBUJGJDBU
'VOE T JOEFQFOEFOU SFHJTUFSFE QVCMJD BDDPVOUJOH GJSN BOE BQQ
BDDPVOUJOH GJSN 5IF "VEJU \$PNNJUUFF BMTP BQQSPWFT BMM BVEJU I
JOEFQFOEFOU SFHJTUFSFE QVCMJD BDDPVOUJOH GJSN BOE BMM QFSNJ
SFHJTUFSFE QVCMJD BDDPVOUJOH GJSN UP UIF .BOBHFS BOE BOZ BGGJ
'VOE T PQFSBUJPOT BOE GJOBODJBM SFQPSUJOH

5IF \$POUSBDU \$PNNJUUFF JT DIBSHFE XJUI BTTJTUJOH UIF #PBSE J
.BOBHFS BOE UIF 4VCBEWJTFS BT NBZ SFBTPOBCMZ CF OFDFTTBSZ UP F
BHSFFNFOU TVCBEWJTFSZ BSSBOHFNFOU BOE EJTUSJCVUJPO BSSBOH

5IF 1FSGPSNBODF \$PNNJUUFF JT DIBSHFE XJUI BTTJTUJOH UIF #PB
'VOE BOE GVOE NBOBHFNFOU XJUI SFTQFDU UP JOWFTUNFOU NBOBHFN
QFSGPSNBODF BOE QFSGPSNBODF CFODINBSLT BOE UIF BQQMJDBC MF S

5IF (PWF\$OBODF\$BNNEUUFFP JT DIBSHFE XJUI IPPOVFSFF JOPI #PBSE@
TFMFDUJOH BOE OPOJOREUJEPFQPMSETPSO@OG@ Sp FFMFDU@O PCTBGRBOHNF O
BHISG BSNFTE OIBVSPNSFGSBUJOPMBOYQ FSNFOESJICHE \$PMBUWHSEZUPG GC O
DPNQFOTBUJPO GPS TFSWJOH BT B 5SVTUFF PO UIF #PBSE *O BEEJUJP
BNPOH PUIFS UIJOHT TFMFDUJOH BOE SFDPNNFOEJOH DBOEJEBUFT UP
OPNJOFFT SFDPNNFOEFE CZ B TIBSFIPMEFS *O FWBMVBUJOH QPUFOUJB
TIBSFIPMEFST UIF \$PNNJUUFF UBLFT JOUP DPOTJEFSBUJPO WBSJPVT G
DIBSBDUFS BOE JOUFHSJUZ CVTJOFTT BOE QSPGFTTJPOBM FYQFSJFOD
BQQMZ TPVOE BOE JOEFQFOEFOU CVTJOFTT KVEHNFOU BOE XPVME BDU
XCPB@DFA@SPSINDBNINFOEF#DGNFOJFSFM BVM EBUFFOE SFDPNNFOEBUJPOT UP

\$PNNJUUFF PS UP UIF #PBSE XJUI SFTQFDU UP WBSJPVT BTQFDUT PG S
BSJTFO BOE SFTQPOTFT UIFSFUP 5IF #PBSE SFDPHOJ[FT UIBU OPU BMM
CF QSBDUJDBM PS DPTU FGGFDUJWF UP FMJNJOBUEF PS NJUJHBUF DFSU
JOWFTUNFOU SFMBUFE SJTLT UP BDIJFWF UIF 'VOE T HPBMT BOE UIBU
DFSUBJO SJTLT NBZ CF MJNJUFE JO UIFJS FGGFDUJWFOFTT .PSFPWFS
UZQJDBMMZ TVNNBSJFT PG UIF SFMFWBOU JOGPSNBUJPO "T B SFTVMU
PWFSTJHIU JT TVCKFDU UP JOIFSFU MJNJUBUJPO

%VSJOH UIF GJTDBM ZFBS FOEFE %FDFNCFS UIF #PBSE NFU
(PWFSOBODF \$PNNJUUFF NFU UJNFT UIF 1FSGPSNBODF \$PNNJUUFF NFU
UJNF BOE UIF \$POUSBDU \$PNNJUUFF NFU UJNF

5SVTUFF 0XOFSTIJQ PG 4FDVVSJUFJ

5IF GPMMPXJOH UBCMFT TIPX UIF EPMMBS SBOHF PG FRVJUJZ TFDV
DPNQBOJFT JO UIF 'SBOLMJO 5FNQMFUPO GVOE DPNQMFY PWFSTFFO CZ

%PMMBS 3BOHF PG
&RVJUZ 4FDVVSJUFJ JO UIF 'VO

"HHSFI
%PMMB
PG &R
4FDVVSJ
"MM 3FI
*OWFTI
\$PNQBC
'SBOL

'VOE \$PNQMFY

0WFSTFR P 0X S\$ TMTM G @YTM" { TM—GVOFS" FNWFOX P\$ YTM @YTM GOS FNQW)™S,PR2000
"QQSF %JWJ -BSHF -BSHF 4NBMI 'VOE \$P
/BNF PG PO 4USB (SPX (SPX 7BM\ .JE \$ (SPX 0WFSTF
5SVTUFF 1PSU 1PSU 1PSU 1PSU 1PSU 1PSU 1PSU 5SVTUI
*OEFQFO
5SVTUFF
"OESFX - /POF /POF /POF /POF /POF /POF /POF 0WFS
4UFQIFO /POF /POF /POF /POF /POF /POF /POF 0WFS
4VTBO .
)FJMCSP /POF /POF /POF /POF /POF /POF /POF 0WFS
"SOPME . /POF /POF /POF /POF /POF /POF /POF 0WFS
3PCJO +
.BTUFST /POF /POF /POF /POF /POF /POF /POF 0WFS
,FO .JMM /POF /POF /POF /POF /POF /POF /POF 0WFS
(1FUFS /POF /POF /POF /POF /POF /POF /POF 0WFS
5IPNBT '
4DIMBGM /POF /POF /POF /POF /POF /POF /POF 0WFS

"SOPI
-FINB /POI
3PCJ(
.BTUF /POI
,FO .. /POI
(1FL
0 #SJ /POI
5IPNE
4DIME /POI

*OUF!
E 5SV
+BOF
5SVTI /PO /PO /PO /PO /PO /PO /PO /PO /POI

*OGPSNBUJPO JT GPS UIF GJTDBM ZFBS FOEFE %FDFNCFS
*OGPSNBUJPO JT GPS UIF DBMFOEBS ZFBS FOEFE %FDFNCFS
.S "EFT SFUJSFE GSPN UIF #PBSE FGGFUDUJWF %FDFNCFS
.T %VFSTUFO SFUJSFE GSPN UIF #PBSE FGGFUDUJWF 'FCSVBSZ
æ .S +PIOTPO SFUJSFE GSPN UIF #PBSE FGGFUDUJWF %FDFNCFS
f 5IF UPUBM BNPVOU PG EFGFSSFE DPNQFOTBUJPO BDDSVFE CZ UIF 5SVTU JODMVEJOH
GPS .S)PXBSE + +PIOTPO JT
† .T 5SVTU JT OPU DPNQFOTBUFE CZ UIF 5SVTU GPS IFS TFSWJDFT BT B 5SVTUFF CFDBV

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.BOBHFS

5IF .BOBHFS B MJNJUFE MJBCJMJUJZ DPNQBOZ PSHBOJ[FE VOEFS U
NBOBHFS UP UIF 'VOE BOE QSPWJEFT BENJOJTUSBUJWF BOE DFSUBJO P
NBOBHFNFOU BHSFFNFOU UIF i.BOBHFNFOU "HSFFNFOUw 5IF .BOBHFS
BOE BMTP TFSWFT BT UIF JOWFTUNFOU NBOBHFS PG PUIFS 'SBOLM
TVCTJEJBSZ PG 'SBOLMJO 3FTPVSDFT B %FMBXBSF DPSQPSBUJPO 'SBO
'SBOLMJO 1BSLXBZ 4BO .BUFP \$BMJGPSOJB JT B HMPCBM JOWFTU
TVCTJEJBSJFT BT 'SBOLMJO 5FNQMFUPO

5IF .BOBHFS IBT BHSFFE VOEFS UIF .BOBHFNFOU "HSFFNFOU TVCH

5IF .BOBHFNFUO "HSFFNFUO XJMM DPOUJOVF JO FGGFDU GPS JUT J
DPOUJOVBODF JT TQFDJGJDBMMZ BQQSPWFE BU MFBTU BOOVBMMZ B C
PG UIF *OEFQFOEFUO 5SVTUFFT DBTUJOH WPUFT JO BDDPSEBODF XJUI I

5IF .BOBHFNFUO "HSFFNFUO QSPWJEFT UIBU UIF .BOBHFS NBZ SFO
JT UFSNJOB CMF XJU IPVU QFOBMUZ CZ UIF #PBSE PS CZ WPUF PG B NBK
UIBO EBZT OPS MFTT UIBO EBZT XSJUUFUO OPUJDF UP UIF .BOBHFS

5IF .BOBHFNFUO "HSFFNFUO QSPWJEFT UIBU UIF .BOB@N@ S JZ

0WFS CJMMJP

-BSHF \$BQ (SPXU 'JSTU CJMMJP

/FYU CJMMJPO

/FYU CJMMJPO

/FYU CJMMJPO

0WFS CJMMJP

-BSHF \$BQ 7BMVF 'JSTU NJMMJ

/FYU NJMMJP

/FYU NJMMJP

/FYU NJMMJP

0WFS CJMMJP

.JE \$BQ 1PSUGPM 'JSTU CJMMJP

/FYU CJMMJPO

/FYU CJMMJPO

/FYU CJMMJPO

0WFS CJMMJP

4NBMM \$BQ (SPXL / "

5IF UBCMF CFMPX TFUT GPSUI UIF NBOBHFNFOU GFFT QBJE CZ UIF
QBSFOUIFTFT XJUI SFTQFDU UP UIF GJTDBM QFSJPET JOEJDBUFE

.BOBHFN

'FFT /FU .BOBH

(SPTT 8BJWFE & 'FFT "GL

'PS UIF 'JTDBM 1F .BOBHFN T 8BJWFST &

'VOE %FDFNCFS 'FFT 3FJNCVS 3FJNCVSTF

"QQSFDJBU.

%JWJEFOE
1PSUGPMJP

(SPXUI 1PSI

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1PSUGPMJP

-BSHF \$BQ
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.JE \$BQ 1PS

4NBMM \$BQ
1PSUGPMJP

"OZ FYQFOTF MJNJUBUJPO BSSBOHFNFOUT JO QMBDF EVSJOH UIF '1
1SPTQFDUVT JO FGGFDU BT BNFOEFE PS TVQQMFNFUOFE GSPN UJNF UP

4VCBEWJTFS

\$MFBS#SJEHF *OWFTUNFOUT --\$ TFSWFT BT UIF TVCBEWJTFS UP U
BHSFFNFOU CFUXFFO UIF .BOBHFS BOE UIF 4VCBEWJTFS UIF i4VCBEWJT
"WFOVF /FX :PSL /FX :PSL 5IF 4VCBEWJTFS JT BO JOEJSFDU XIPM

"T DPNQFOTBUJPO GPS JUT TFSWJDFT UIF .BOBHFS QBZT UP UIF 4
UP UIF .BOBHFS CZ UIF 'VOE OFU PG BOZ XBJWFST BOE FYQFOTF SFJNC

8FTUFSO "TTFU .BOBHFNFOU \$PNQBOZ --\$ PSHBOJ[FE VOEFS UIF M
UPHFUIFS XJUI UIF 4VCBEWJTFS UIF i4VCBEWJTFSw NBOBHFT UIF QPS
JU QVSTVBOU UP B TFQBSBUF TVCBEWJTSPSZ BHSFFNFOU CFUXFFO UIF .
UPHFUIFS XJUI UIF 4VCBEWJTSPSZ "HSFFNFOU UIF i4VCBEWJTSPSZ "HSFF
&BTU \$PMPSBEP #PVMFWBSE 1BTBEFOB \$BMJGPSOJB BOE &JHIU
JOWFTUNFOU BEWJTFS UP JOTUJUVUJPOBM BDDPVOUT TVDI BT DPSQPS
"TTFU JT BO JOEJSFDU XIPMMZ PXOFE TVCTJEJBSZ PG 'SBOLMJO 3FTPV
SFTQPOTJCMF TVCKFDU UP UIF HFOFSBM TVQFSWJTJPO PG UIF .BOBHFS
DBTI BOE TIPSU UFSN JOTUSVNFOUT BMMPDBUFE UP JU 'PS 8FTUFSO "T
8FTUFSO "TTFU PG UIF QPSUJPO PG UIF 'VOE T BWFSBHF EBJMZ OF
OFU PG FYQFOTF XBJWFST BOE SFJNCVSTFNFOUT

6OEFS UIF 4VCBEWJTPSZ "HSFFNFOU TVCKFDU UP UIF TVQFSWJTJF
QSPWJEFT XJUI SFTQFDU UP UIF QPSUJPO PG UIF 'VOE T BTTFUT BMMPD
NBOBHFNFOU BOE TVQFSWJTJPO GVSJOTIFT B DPOUJOVPVT JOWFTUNFO
JOWFTUNFOU PCKFDUJWFT QPMJDJFT BOE SFTUSJDUJPOT BOE QMBDFT
NBZ EFMFHBUF UP DPNQBOJFT UIBU UIF 4VCBEWJTFS DPOUSPMT JT DPC
4VCBEWJTFS T EVUJFT VOEFS B 4VCBEWJTPSZ "HSFFNFOU TVCKFDU UP
SFMJFWFE PG JUT EVUJFT PS PCMJHBUJPOT VOEFS UIF 4VCBEWJTPSZ "H

FYQFOTFT CZ XBZ PG JMMVTUSBUJPO BT J FYQFOTFT PG UIF SFPSHB
 PS UIF BDRVJTJUJPO PG BMM PS TVCTUBOUJBMMZ BMM PG UIF BTTFUT P
 GPS B NFFUJOH PG TIBSFIPMEFST PG UIF 'VOE PS DMBTT FYDFQU UP U
 PS UIF BQQSPWBM PG UIF JOEFQFOEFOU SFHJTUFSFE QVCMJD BDDPVOU
 USBOTGFS BHFOU PS PUIFS TFSWJDF QSPWJEFS JO FBDI DBTF UP UIF F
 UIF QVSQPTFT PG GFF EJTDMPVTSF JO 'PSN / " BT UIF TBNF NBZ CF BN
 MJNJUBUJPO UIF .BOBHFS XJMM BT OFDFTTBSZ XBJWF NBOBHFNFOU G
 QFSNJUUFE UP SFDBQUVSF BNPVOUT XBJWFE PS SFJNCVSTFE UP B DMB
 PQFSBUJOH FYQFOTFT IBWF GBMMFO UP B MFWFM CFMPX UIF DMBTT T F
 UIF .BOBHFS SFDBQUVSF BOZ BNPVOU UIBU XPVME SFTVMU PO BOZ QBS
 PQFSBUJOH FYQFOTFT FYDFFEJOH TVDI FYQFOTF MJNJUBUJPO PS BOZ P
 SFEVDFE PS UFSNJOBUEFE VOEFS DFSUBJO DJSDVNTUBODFT

1PSUGPMJP .BOBHFS

OUIFS "DDPVOUT .BOBHFE CZ UIF 1PSUGPMJP .BOBHFS

5IF UBCMF CFMPX JEFUJGJFT UIF QPSUGPMJP NBOBHFS UIF OVN
 NBOBHFS IBWF EBZ UP EBZ NBOBHFNFOU SFTQPOTJCJMJUJFT BOE UIF
 DBUFHPSJFT SFHJTUFSFE JOWFTUNFOU DPNQBOJFT PUIFS QPPMFE JOV
 OVNCF S PG BDDPVOUT BOE UPUBM BTTFUT JO UIF BDDPVOUT XIFS GFF
 6OMFTT OPUFE PUIFSXJTF BMM JOGPSNBUJPO JT QSPWJEFE BT PG %FD

		/VNCFS	5PUB "TTFU .BOBH	/VNCFS P "DDPVOUT . GPS XIJDI "	"TTFUT .BOBH XIJDI "EWJTPS
1PSUGPMJP	5ZQF	"DDPV	#JMM	1FSGPSNE	1FSGPSNBOD
.BOBHFS	"DDPV	.BOBH		#BTFE	#JMMJPOT

"QQSFDJBUJPO 1PSUGPMJP

4DPUU (ME	3FHJTL *OWFT \$PNQB			/POF	/POF
	OUIFS 1PPMF *OWFT 7FIJDM			/POF	/POF
	OUIFS "DDPV			/POF	/POF
.JDIBFM ,BHBO	3FHJTL *OWFT \$PNQB			/POF	/POF
	OUIFS 1PPMF *OWFT 7FIJDM			/POF	/POF
	OUIFS "DDPV			/POF	/POF

4UFQIFO 3	3FHJTL *OWFT \$PNQB	/POF	/POF
	0UIFS 1PPMF *OWFT 7FIJDM	/POF	/POF
	0UIFS "DDPV(/POF	/POF

%JWJEFOE 4USBUFHZ 1PSUGPMJP

+PIO #BME	3FHJTL *OWFT \$PNQB	/POF	/POF
	0UIFS 1PPMF *OWFT 7FIJDM	/POF	/POF
	0UIFS "DDPV(/POF	/POF

.JDIBFM \$MBSGFME	3FHJTL *OWFT \$PNQB	/POF	/POF
	0UIFS 1PPMF *OWFT 7FIJDM	/POF	/POF
	0UIFS "DDPV(/POF	/POF

1FUFS 7BOEFSMF	3FHJTL *OWFT \$PNQB	/POF	/POF
	0UIFS 1PPMF *OWFT 7FIJDM	/POF	/POF
	0UIFS "DDPV(/POF	/POF

(SPXUI 1PSUGPMJP

&WBO #BV	3FHJTL *OWFT \$PNQB	/POF	/POF
	0UIFS		

.BSHBSFU
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3FHJTL
*OWFT
\$PNQB

/POF

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0UIFS
1PPMF
*OWFT
7FIJDM

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-BSHF \$BQ 7BMVF 1PSUGPMJP

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,IBZLJO

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.JDIBFM ,BHBO /POF
4UFQIFO 3JHP /POF

%JWJEFOE 4USBUFHZ 1PSUGPMJP

+PIO #BMEJ /POF
.JDIBFM \$MBSGFM /POF
1FUFS 7BOEFSMFI /POF

(SPXUI 1PSUGPMJP

&WBO #BVNBO /POF
"SBN & (SFFO /POF
"NBOEB -FJUIF /POF

-BSHF \$BQ (SPXUI 1PSUGPMJP

1FUFS #PVSCFBV /POF
&SJDB 'VSGBSP /POF
.BSHBSFU 7JUSBO /POF

-BSHF \$BQ 7BMVF 1PSUGPMJP

%NJUSZ ,IBZLJO /POF
%FFQPO /BH /POF

.JE \$BQ 1PSUGPMJP

#SJBO . "OHFSBN /POF
.BUUIFX -JMMJOH /POF

4NBMM \$BQ (SPXUI 1PSUGPMJP

+FGGSFZ #BJMJO /POF
"SBN & (SFFO /POF

*U JT BOUJDJQBUFE UIBU .S (MBTTFS XJMM TUFQ EPXO BT
%FDFNCFS 5IFSFBGUF .S (MBTTFS XJMM DPOUJOV
\$MFBS#SJEHF *OWFTUNFOUT --\$
5IF JOGPSNBUJPO JT BT PG 'FCSVBSZ
*U JT BOUJDJQBUFE UIBU .S #PVSCFBV XJMM TUFQ EPXO B1
%FDFNCFS

1PUFOUJBM \$POGMJDUT PG *OUFSFTU

*O UIJT TVCTFDUJPO BOE UIF OFYU TVCTFDUJPO UJUMFE i1PSUGPMJ
\$MFBS#SJEHF *OWFTUNFOUT --\$

1PUFOUJBM DPOGMJDUT PG JOUFSFTU NBZ BSJTF XIFO UIF 'VOE T QF
SFTQPOTJCMJUJFT XJUI SFTQFDU UP POF PS NPSF PUIFS GVOET PS PU

5IFSF JT OP HVBSBOUFF IPXFWFS UIBU UIF QPMJDJFT BOE QSPDFEVSF
BOE PS QSFWFOU FWFSZ TJUVBUJPO JO XIJDI BO BDUVBM PS QPUFOUJB

Allocation of Limited Time and Attention " QPSUGPMJP NBOBHFS XIP JT SFTQPOTJCMF GF
BDDPVOUT NBZ EFWPUF VOFRVBM UJNF BOE BUUFOUJPO UP UIF NBOBHFS
DPOGMJDU NBZ CF NPSF QSPOPVODFE XIFSF GVOET BOE PS BDDPVOUT
JOWFTUNFOU TUSBUFHJFT

Allocation of Investment Opportunities *G B QPSUGPMJP NBOBHFS JFOUJGJFT BO JOWF
NVMUJQMF GVOET BOE PS BDDPVOUT UIF PQQPSUVOJUZ NBZ CF BMMPD
GVOE T BCJMJUJZ UP UBLF GVMM BEWBOUBHF PG UIF JOWFTUNFOU PQQP
UIBU BMM BDDPVOUT JODMVEJOH UIF 'VOE BSF USFBUFE FRVJUBCMZ

Pursuit of Differing Strategies "U UJNFT B QPSUGPMJP NBOBHFS NBZ EFUFSNJOF U
BQQSPQSJBUF GPS POMZ TPNF PG UIF GVOET BOE PS BDDPVOUT GPS XI
UIBU DFSUBJO PG UIF GVOET BOE PS BDDPVOUT TIPVME UBLF EJGGFSJO
QPSUGPMJP NBOBHFS NBZ QMBDF TFQBSBUF USBOTBDUJPO GPS POF P
TFDVSJUJZ PS UIF FYFDVUJPO PG UIF USBOTBDUJPO PS CPUI UP UIF EF

Selection of Broker/Dealers *O BEEJUJPO UP FYFDVUJOH USBEFT TPNF CSPLFS EF
BT UIPTF UFSNT BSF EFGJOFE JO 4FDUJPO F PG UIF "DU XIJDI
NJHIU IBWF PUIFSXJTF CFFO BWBJMBCMF 5IFTF TFSWJDFT NBZ CF NPSF
SFBTPO UIF 4VCBEWJTFS IBT GPSNFE B CSPLFSBHF DPNNJUUFF UIBU SF
CSPLFS EFBMFST CFTU FYFDVUJPO BOE TPGU EPMMBS VTBHF

Variation in Compensation " DPOGMJDU PG JOUFSFTU NBZ BSJTF XIFSF UIF GJOB
NBOBHFS EJGGFS BNPOH UIF GVOET BOE PS BDDPVOUT UIBU IF PS TIF N
UIF QFSDFOUBHF QBJE UP UIF 4VCBEWJTFS EJGGFST BNPOH GVOET BO
NBOBHFNFOU GFFT PS QFSGPSNBODF CBTFE NBOBHFNFOU GFFT UIF QF
BOE PS BDDPVOUT PWFS PUIFST

5IF QPSUGPMJP NBOBHFS NJHIU CF NPUJWBUFE UP GBWPS GVOET BO
UIF NBOBHFS BOE PS JUT BGGJMJBUFF IBWF JOUFSFTUT 4JNJMBSMZ U
QPSUGPMJP NBOBHFS T QFSGPSNBODF SFDPSE PS UP EFSJWF PUIFS SF

\$POTFRVFOUMZ QPSUGPMJP NBOBHFS T DBO IBWF UXP UIJSET PG U
NBOBHFE QSPEVDUT 'PS DFOUSBMJ[FE SFTFBS DI BOBMZTUT UXP U
POF PG NPSF PG 4VCBEWJTFS T NBOBHFE GVOET XIJMF POF UIJSE
4VCBEWJTFS UIFO NBLFT B DPNQBOZ JOWFTUNFOU JO UIF QSPQSJF
5IJT JOWFTUNFOU JT B DPNQBOZ BTTFU IFME PO UIF CBMBODF TIF
WFTUJOH SFRVJSFNFOU

- 'SBOLMJO 3FTPVSDF T 3FTUSJDUFE 4UPDL %FGFSSBM%B NBOEBUPSZ
DPNQFOTBUJPO JOUP 'SBOLMJO 3FTPVSDF T SFTUSJDUFE TUPDL 5IF
SFRVJSFNFOU

4FWFSBM GBDUPST BSF DPOTJEFSFE CZ UIF 4VCBEWJTFS T 4FOJPS
GPS QPSUGPMJP NBOBHFS T 5IFTF JODMVEF CVU BSF OPU MJNJUFE UP

- *OWFRP BBDUBZSOUQBSBU DPVQSPZUGP MFS NBOBHFS STDPNIG DOEBTU
GVOE BDDPVOUT NBOBHFE CZ UIF QPSUGPMJP NBOBHFS *OWFTUNF
NFBTVSFE BHBJOTU UIF BQQMJDBC MF QSPEVDU CFODINBSL F H B
TFU GPSUI JO UIF 0A Ð à P BOE V

*OEFQFOEFOU 3FHJTUFSFE 1VCMJD "DDPVOUJOH 'JSN
1SJDFXBUFSIPVTF\$PPQFST --1 &BTU 1SBUU 4USFFU 4VJUF
JOEFQFOEFOU SFHJTUFSFE QVCMJD BDDPVOUJOH GJSN

FDPOPNJD USFOET BOE QPSUGPMJP TUSBUFHZ NBSLFU RVPUBUJPO T GF
TFSWJDFT *G B SFTFBSDI TFSWJDFT BMTP BTTJTUT UIF 4VCBEWJTFS JO
BENJOJTUSBUJWF GVODUJPOT UIFO POMZ UIF QFSDFOUBHF PS DPNQPC
EFDJTJPO NBLJOH QSPDFTT NBZ CF QBJE JO DPNNJTJPO EPMMBST 5IJ
USBOTBDUJPO PS UIF PWFSBMM SFTQPOTJJCJMJUJFT UIBU UIF 4VCBEWJT
FYFSDJTF JOWFTUNFOU EJTD SFUJPO 5IF 4VCBEWJTFS NBZ BMTP IBWF B
SFTFBSDI TFSWJDFT UP UIF 4VCBEWJTFS JO FYDIBOHF GPS B DFSUBJO V
8IJMF UIF QBZNFUO PG IJHIFS DPNNJTJPO JODSFBTFT UIF 'VOE T DPT
CSPLFSBHF BOE SFTFBSDI TFSWJDFT TJHOJGJDBOUMZ SFEVDFT JUT FYC
TFSWJDFT GSPN CSPLFST TP DBMMFE ITPGU EPMMBSW BSSBOHFNFOUT
BVUIPSJ[FE UP VTF TPGU EPMMBS BSSBOHFNFOUT JO PSEFS UP PCUBJO
NBZ OPU CF BCMF PS NBZ DIPPTF OPU UP VTF TPGU EPMMBS BSSBOHFNF
PS GPS PUIFS SFBTPOT

3FTFBSDI TFSWJDFT GVSOJTIFE UP UIF 4VCBEWJTFS CZ CSPLFST U
CZ UIF 4VCBEWJTFS JO TFSWJDJOH PUIFS JOWFTUNFOU DPNQBOJFT BOE
TFSWJDFT GVSOJTIFE UP UIF 4VCBEWJTFS CZ CSPLFST UIBU FGGFDU TF
XIJDI UIF 4VCBEWJTFS NBOBHFT NBZ CF VTFE CZ UIF 4VCBEWJTFS JO TF
CZ UIF 4VCBEWJTFS JO NBOBHJOH BOZ QBSUJDMBS BDDPVOU JODMVE

'JSNT UIBU QSPWJEF SFTFBSDI BOE CSPLFSBHF TFSWJDFT UP UIF 4
QPPMFE JOWFTUNFOU WFIJDMFT BEWJTFE CZ UIF 4VCBEWJTFS BOE UIF
GPS EPJOH TP 4VDI CSPLFSBHF CVTJOFTT JT QMBDFE PO UIF CBTJT PC
CBTFE PO BOZ TBMFT PG UIF 'VOE PS PUIFS QPPMFE JOWFTUNFOU WFIJ

5IF 'VOE DPOUFNQMBUFT UIBU DPOTJTUFOU XJUI UIF QPMJDZ PG P
DPOEVDUFE UISPVHI IBGGJMJBUE CSPLFS EFBMFST W BT EFGJOFE JO U
BDDPSEBODF XJUI 3VMF F VOEFS UIF "DU UP FOTVSF UIBU BMM C
BOE GBJS JO UIF DPOUFYU PG UIF NBSLFU JO XIJDI TVDI BGGJMJBUEFT P
'VOE EJE OPU QBZ BOZ CSPLFSBHF DPNNJTJPO UP JUT BGGJMJBUEFT

"HHSFHBUF #SPLFSBHF \$PNNJTJPO 1BJE

5IF UBCMF CFMPX TIPXT UIF BHHSFHBUF CSPLFSBHF DPNNJTJPO

<u>'VOE</u>	<u>'PS UIF 'JTDBM</u>	<u>"HHSFHBUF #S</u>
<u>"QQSFDJBUJPO 1P</u>	<u>%FDFNCFS</u>	<u>\$PNNJTJPO</u>

%JWJEFOE 4USBU

(SPXUI 1PSUGPMJI

-BSHF \$BQ (SPXUI

-BSHF \$BQ 7BMVF

.JE \$BQ 1PSUGPM.

4NBMM \$BQ (SPXU

5IF JODSFBTF JO BHHSFHBUF CSPLFSBHF DP@€` @ HF JODS

\$MBTT

/BNF BOE "EESFTT

\$MBTT

/BNF BOE "EESFTT

1FSDFOU PG \$M

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iDPOUSPMw UIF 'VOE NBZ CF BCMF UP EFUFNSJOF PS TJHOJGJDBOUMZ J
TIBSFIPMEFST 5IVT UIF 1BSUJDJQBUJOH *OTVSBODF \$PNQBOJFT MJTUF
/FWFSUIFMFTT XJUI SFTQFDU UP BOZ 'VOE TIBSFIPMEFS NFFUJOH B 1B

UJNFMZ WPUJOH JOTUSVDUJPO T GSPN JUT DPOUSBDU PXOFST JO BDDPS
BQQMJDBC MF DPOUSBDU JTTVFE CZ UIF JOTVSBODF DPNQBOZ BOE UP U

<u>'VOE</u>	<u>/BNF BOE "EESFTT</u>	<u>1FSDFOU PG 'V</u>
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'SBOLMJO %JTUSJCVUPST --\$ BO JOEJSF DU XIPMMZ PXOFE CSPLF
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BHSFFNFOU BT BNFOEFE UIF i%JTUSJCVUJPO "HSFFNFOUw

QSPWJEFE *O BEEJUUPO UIF %JTUSJCVUPS UIF .BOBHFS BOE PS DFSU
CBTJT GPS UIF JOJUJBM TFU VQ PG UIF 'VOE PO B 4FSWJDF "HFOU T TZ
PS GPS PUIFS SFBTPOT 'VSUIFSNPSF UIF %JTUSJCVUPS UIF .BOBHFS
BOE USBJOJOH DPTUT PG 4FSWJDF "HFOUT JODMVEJOH JO TPNF DBTFT
"HFOUT *O BEEJUUPO UIF %JTUSJCVUPS UIF .BOBHFS BOE PS DFSUBJ
PUIFS UPPMT BOE TVQQPSU TFSWJDFT UIBU GBDJMJUBUF UIF NBSLFUJO
'SBOLMJO 5FNQMFUPO BOE PS JUT BGGJMJBUFT *U JT MJLFMZ UIBU 4FS
JODMVEF UIPTF GJSNT XJUI XIJDI UIF .BOBHFS UIF %JTUSJCVUPS BOE
BSSBOHFNFOUT

ZPVS 4FSWJDF "HFOU UP PCUBJO NPSF JOGPSNBUJPO PO IPX UIJT DPNQ
SFDPNNFOEUBUJPO PG UIF 'VOE

%FBMFS \$PNNJTTJPOT BOE \$PODFTTJPOT

'SPN UJNF UP UJNF UIF %JTUSJCVUPS PS UIF .BOBHFS BU JUT FYC
iDPODFTTJPOTw UP EFBMFST UIBU TFMM PS BSSBOHF GPS UIF TBMF PC
JT QBSU 4VDI DPODFTTJPOT QSPWJEFE CZ UIF %JTUSJCVUPS PS UIF .E
XJUI QSFBQQSPWFE DPOGFSFODFT PS TFNJOBST TBMFT PS USBJOJOH G
FNQMPZFFT QBZNFUO GPS USBWFM FYQFOTFT JODMVEJOH MPEHJOH J
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UP EJTQPTF PG UIF 'VOE TIBSFT

7"-6"5*0/ 0' 4)"3&4

5IF /"7 QFS TIBSF PG FBDI DMBTT PG UIF 'VOE JT HFOFSBMMZ DBMD
Q N &BTUFSO UJNF PO FBDI EBZ PO XIJDI UIF /:4& JT PQFO "T PG UIF
FWFSZ XFFLEBZ FYDFQU JO UIF FWFOU PG BO FNFSHFODZ PS GPS UIF G
:FBS T %BZ .BSUJO -VUIFS ,JOH +S %BZ 1SFTJEFOUT %BZ (PPE 'SJE
*OEFQFOEFODF %BZ -BCPS %BZ 5IBOLTHJWJOH %BZ BOE \$ISJTUNBT %B
TQFDJGJD FYQFOTFT UIF QFS TIBSF /"7 PG FBDI DMBTT PG UIF 'VOE XJ
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#PBSE SFWJFXT BOE BQQSPWFT UIF VTF PG UIPTF QPMJDJFT BOE QSPDF
WPUJOH SFTQPOTJJCJMJUJ GPS UIF 'VOE

4IPVME UIF .BOBHFS CFDPNF SFTQPOTJCMF GPS WPUJOH QSPYJFT
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CZ UIF #PBSE *O UIF DBTF PG B NBUFSJBM DPOGMJDU CFUXFFO UIF JOU
QFSTPOT SFTQPOTJCMF GPS WPUJOH BU UIF .BOBHFS BOE BOZ GVOE U
BEESFTT UIF DPOGMJDU BOE PS IPX UP WPUF UIF QSPYJFT 5IF .BOBHFS
BQQMJDBC MF TFDVSJUJFT MBXT BOE SFHVMBUJJPOT

5IF .BOBHFS TIBMM CF SFTQPOTJCMF GPS HBUIFSJOH SFMFWBOU E
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QFSTPOOFM UIBU BSF OPU GVOE BGGJMJBUFFE QFSTPOOFM J VQPO UIF
QSPWJEFE UIBU TVDI GJMJOHT BSF OPU NBEF VOUJM DBMFOEBS EBZT
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'VOE T *OUFSOFU TJUF UIBU JT BDDFTTJCMF CZ UIF QVCMJD PS UISPVH

5IF 'VOE DVSSFOUMZ EJTDMPTFT JUT DPNQMFUF QPSUGPMJP IPMEJ
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6OEFS UIF QPMJDZ UIF 'VOE NBZ SFMFBTF QPSUGPMJP IPMEJOHT J
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XIFSF UIF QBSUZ SFDFJWJOH UIF JOGPSNBUJPO JT VOEFS B EVUZ PG DF
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4UBUF 4USFFU #BOL BOE 5SVT	%BJMZ	/POF
451 *OWFTUNFOUT	%BJMZ	/POF
4VO(BSE 1SPUFHFOU GPSNFS	%BJMZ	/POF
5IF #BOL PG /FX :PSL .FMMPO	%BJMZ	/POF
5IF /PSUIFSO 5SVTU \$PNQBOZ	%BJMZ	/POF
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1PSUGPMJP IPMEJOHT JOGPSNBUJPO GPS UIF 'VOE NBZ BMTF CF SF
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&YDMVEFE GSPN UIF MJTUT PG POHPJOH BSSBOHFNFOUT TFU GPSU
EJTDMPTVSF PG QPSUGPMJP IPMEJOHT JOGPSNBUJPO PDDVST DPODVSS
JT JODMVEFE JO B QVCMJD GJMJOH XJUI UIF 4&\$ UIBU JT SFRVJSFE UP
JOGPSNBUJPO JT NBEF BWBJMBCMF OP FBSMJFS UIBO UIF EBZ OFYU GP
PO JUT XFCTJUF BT EJTDMPTFE JO UIF 'VOE T 1SPTQFDUVT 5IF BQQSP
PCUBJOFE CFGPSF FOUFSJOH JOUP BOZ OFX POHPJOH BSSBOHFNFOUT PS
QPSUGPMJP IPMEJOHT JOGPSNBUJPO PS XJUI SFTQFDU UP BOZ FYDFQU

3FMFBTF PG -JNJUFE 1PSUGPMJP)PMEJOHT *OGPSNBUJPO

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'VOE T \$IJFG \$PNQMJBODF 0GGJDFS PS EFTJHOFF BT DPOTJTUFUO XJUI
OPO QVCMJD JOGPSNBUJPO BCPVU UIF 'VOE T QPSUGPMJP IPMEJOHT NB
PUIFS JOWFTUNFOU NBOBHFS BTLFE UP QSPWJEF JOWFTUNFOU NBOBHFS

-JNJUBUJPOT PG 1PMJDZ

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BNFOE UIF %FDMBSBUJPO PS BVUIPSJ[F UIF NFSHFS PS DPOTPMJEBUJPC
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BQQSPWBM

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PXOFSTIJQ DPOWFSTJPO BOE FYDIBOHF GFBUVSFT NJOJNVN QVSDIBTF

Z JO UIF TFDVSJUFJT PUIFS UIBO UIF TFDVSJUFJT PG PUIFS SFHVMBU
DPOUSPMT BOE UIBU BSF USFBUFE BT FOHBHFE JO UIF TBNF TJNJMBS
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*O HFOFSBM GPS QVSQPTFT PG UIF HSPTT JODPNF UFTU EFTDS

BG UFS 0DUPCFS PS JG UIFSF JT OP TVDI MPTT UIF OFU MPOH UFSN

SFTQFDU UP GVUVSF QBZNFOUT PO TVDI TXBQT PS NBZ FMFDU VOEFS D
UBY QVSQPTFT BT PSEJOBSZ JODPNF PS MPTT

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"OZ TFDUJPO DPOUSBDUT IFME CZ UIF 'VOE BU UIF FOE PG JUT UBYE
MBUGS EBUFT BT QSFTDSJCFE VOEFS UIF \$PEF BSF SFRVJSFE UP CF NB
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DPOUSBDUT DMPTFE EVSJOH UIF UBYBCMF ZFBS 1SPWJEFE TVDI QPTJU
USBOTBDUJPOw OPS QBSU PG B iTUSBEEMF w PG UIF SFTVMUJOH OFU
PG TVDI OFU HBJO PS MPTT XJMM CF USFBUFE BT TIPSU UFSN DBQJU
BDUVBMMZ IFME CZ UIF 'VOE

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QSFNJVNT BSF SFDPHOJ[FE XIFO UIF PQUJPO DPOUSBDU FYQJSFT UIF P
PUIFSXJTF UFSNJOBUFFT UIF PQUJPO F H UISPVHI B DMPTJOH USBOTBI
TFMMT PS EFMJWFST UIF VOEFMZZJOH TFDVSJUZ UIF 'VOE HFOFSBMMZ
BOE UIF PQUJPO QSFNJVNT SFDFJWFE CZ UIF 'VOE NJOVT C UIF 'VOE T
UFSN PS MPOH UFSN EFQFOEJOH VQPO UIF IPMEJOH QFSJPE PG UIF VOE
UP UIF FYFSDJTF PG B QVU PQUJPO XSJUUFU CZ JU UIF 'VOE HFOFSBM
DPTU CBTJT JO UIF TFDVSJUJFT QVSDIBTFE (BJO PS MPTT BSJTJOH JO
PUIFS UIBO UISPVHI UIF FYFSDJTF PG UIF PQUJPO XJMM CF TIPSU UFSN
CZ UIF 'VOE JT HSFBUFFS PS MFTT UIBO UIF BNPVOU QBJE CZ UIF 'VOE J
PQUJPO XSJUUFU CZ UIF 'VOE FYQJSFT VOFYFSDJTTFE UIF 'VOE HFOFSB

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MPTT UP UIF FYUFOU UIBU UIF QSPQFSUZ VTFE UP DMPTF UIF TIPSU TBM
SFTQFDU UP DFSUBJO TJUVBUJPO XIFSF UIF QSPQFSUZ VTFE CZ UIF 'V
PG UIF TIPSU TBMF TQFDJBM SVMFT HFOFSBMMZ USFBU UIF HBJOT PO T
UFSNJOBUFFT UIF SVOOJOH PG UIF IPMEJOH QFSJPE PG iTVCTUBOUJBMMZ
TBMF XJMM CF USFBUFE BT B MPOH UFSN DBQJUBM MPTT JG PO UIF EB
CZ UIF 'VOE GPS NPSF UIBO POF ZFBS

5IF 'VOE NBZ QVSDIBTF EFCU PCMJHBUJPO XJUI PSJHJOBM JTTVF
4PNF EFCU PCMJHBUJPO XJUI B GJYFE NBUVSJUZ EBUF PG NPSF UIBO M
PCMJHBUJPO XJUI B GJYFE NBUVSJUZ EBUF PG NPSF UIBO POF ZFBS G
BSF JTTVFE XJUI 0*% (FOFSBMMZ UIF BNPVOU PG UIF 0*% JT USFBUFE
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SFDFJWFE VOUEM B MBUGS UJNF VTVBMMZ XIFO UIF EFCU TFDVSJUZ NB
JOGMBUJPO JOEFYFE CPOET BMTP NBZ CF USFBUFE BT 0*% UIBU JT JOD

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UIF TFDPOEBSZ NBSLFU NBZ CF USFBUFE BT IBWJOH iNBSLFU EJTDPOU
SFEFNQUJPO QSJDF PG B EFCU PCMJHBUJPO PS JO UIF DBTF PG BO PC
QSJDF PG TVDI PCMJHBUJPO 6OEFS UIF \$PEF J HFOFSBMMZ BOZ HB
QSJODJQBM PO B EFCU TFDVSJUZ IBWJOH NBSLFU EJTDPOU JT USFBU
EPFT OPU FYDFFE UIF iBDDSVFE NBSLFU EJTDPOUw PO TVDI EFCU TFDY
EJTDPOU DVSSFOUMZ JO XIJDI DBTF UIF 'VOE XJMM CF SFRVJSFE UP J
PSEJOBSZ JODPNF BOE UIVT EJTUSJCVUF JU PWFS UIF UFSN PG UIF EF
VOUEM B MBUGS UJNF VQPO QBSUJBM PG GVMM SFQBZNFU PS EJTQPT
EJTDPOU DVSSFOUMZ UIF SBUF BU XIJDI UIF NBSLFU EJTDPOU BDDSV
XIJDI PG UIF QFSNJUUFU BDDSVBM NFUIPET UIF 'VOE FMFDUT

4PNF EFCU PCMJHBUJPOT XJUI B GJYFE NBUVSJUZ EBUF PG POF ZF

B SFGVOE JO SFTQFDU PG TVDI UBYFT JU NBZ DIPPTF OPU UP 5BY DPC
SFEVDF PS FMJNJOFUF TVDI UBYFT JO TPNF DBTFT 5IF 'VOE EPFT OPU
TIBSFIPMEFST XIP UIFSFGPSF XJMM OPU CF FOUJUMFE UP DSFEJUT PS
'VOE 'PSFJHO UBYFT QBJE CZ UIF 'VOE NBZ SFEVDF UIF SFUVSO GSPN U

6OEFS DFSUBJO DJSDVNTUBODFT JG UIF 'VOE SFDFJWFT B SFGVOE
'VOE TIBSFT DPVME CF BGGFDUFE PS BOZ GPSFJHO UBY DSFEJUT PS EF
GPSFJHO UBYFT GPS UIF DVSSFOU ZFBS DPVME CF SFEVDFE

6OEFS 4FDUJPO PG UIF \$PEF HBJOT PS MPTTFT BUUSJCVUBCMF
'VOE BDDSVFT JODPNF PS SFDFJWBCMF PS FYQFOTFT PS PUIFS MJBCJM
BDUVBMMZ DPMMFDUT TVDI JODPNF PS QBZT TVDI MJBCJMJUJFT BSF HF
MPTTFT PO GPSFJHO DVSSFODZ GPSFJHO DVSSFODZ GPSXBSE DPOUSBD
EJTQPTJUJPO PG EFCU TFDVSJUJFT EFOPNJOBUE JO GPSFJHO DVSSFOU
CFUXFFO UIF BDRVJTJUJPO BOE EJTQPTJUJPO EBUFT BSF BMTF USFBU
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Passive Foreign Investment Companies *G UIF 'VOE QVSDIBTFT FRVJUZ JOUFSFTUT JO
FRVJUZ JOUFSFTUT JO GPSFJHO FOUJUJFT USFBUFE BT 1'*\$T GPS 6 4
FMFDUJPO JU NBZ CF TVCKFDU UP 6 4 GFEFSBM JODPNF UBY PO B QP
TVDI TIBSFT FWFO JG TVDI JODPNF JT EJTUSJCVUFE BT B UBYBCMF EJU
OBUVSF PG JOUFSFTU NBZ CF JNQPTFE PO UIF 'VOE JO SFTQFDU PG EFC

O HFOFSBM B 1'\$ JT BOZ GPSFJHO DPSQPSBUJPO JO XIJDI J
JODPNF PS JJ UIF BWFSBHF QFSDFOUBHF PG UIF BTTFUT HFOFSBMMZ
PS BSF IFME GPS UIF QSPEVDUJPO PG QBTTJWF JODPNF JT BU MFBTU
JOUFSFTU JODMVEJOH JODPNF FRVJWBMFU UP JOUFSFTU SPZBMUJFT
USBOTBDUJPO BOE DPNNPEJUJFT USBOTBDUJPO JODPNF GSPN DFSUE
JODPNF GPS UIJT QVSQPTF EPFT OPU JODMVEF DFSUBJO UZQFT PG QBT

G UIF 'VOE XFSF UP JOWFTU JO B 1'\$ BOE UJNFMZ FMFDU UP USF
UIF GJSTU ZFBS PG JUT IPMEJOH QFSJPE JO UIF 1'*\$ TUPDL JO MJFV PO
JODMVEF JO JODPNF FBDI ZFBS B QPSUJPO PG UIF PSEJOBSZ FBSOJOHT
EJTUSJCVUFE UP UIF 'VOE 5IF 'VOE NJHIU IBWF UP EJTUSJCVUF TVDI B
JNQPTJUJPO PG UIF FYDJTF UBY *O PSEFS UP EJTUSJCVUF UIJT JODP
MJRVJEBUF QPSUGPMJP TFDVSJUJFT UIBU JU NJHIU PUIFSXJTF IBWF DP
MPTT *O PSEFS UP NBLF UIF IRVBMJGJFE FMFDUJOH GVOEW FMFDUJPO
GSPN UIF 1'*\$T JO XIJDI JU JOWFTUT XIJDI NBZ CF EJGGJDVMU PS JNQ

G UIF 'VOE XFSF UP JOWFTU JO B 1'\$ BOE NBLF B NBSL UP NBSLF
SFQVSDIBTFE JUT TUPDL JO UIBU 1'*\$ BU UIF FOE PG FBDI ZFBS *O TVD
BOE XPVME EFEVDU BOZ TVDI MPTTFT BT PSEJOBSZ MPTTFT UP UIF FYU
TFQBSBUFMZ GPS FBDI 1'*\$ PXOFE CZ UIF 'VOE BOE PODF NBEF XPVME
VOMFTT SFWPLFE XJUI UIF DPOTFOU PG UIF *34 #Z NBLJOH UIF FMFDUJ
DPOTFRVFODFT XJUI SFTQFDU UP JUT PXOFSTIJQ PG TIBSFT JO B 1'*\$ C
JO FYDFTT PG UIF EJTUSJCVUJPO JU SFDFJWFT GSPN 1'*\$T BOE JUT QS
EJTUSJCVUF TVDI FYDFTT JODPNF BOE HBJO UP TBUJTGZ UIF EJTUSJ
*O PSEFS UP EJTUSJCVUF UIJT JODPNF BOE BWPJE B UBY BU UIF 'VOE M
UIBU JU NJHIU PUIFSXJTF IBWF DPOUJOVFE UP IPME QPUFOUJBMZ SFT

.-1T

.-1T BSF HFOFSBMMZ USFBUFE BT QBSUOFSTIJQT GPS 6 4 GFEFSBM
QBSUOFSTIJQ GPS 6 4 GFEFSBM JODPNF UBY QVSQPTFT JT OPU JUTFMG

EJTUSJCVUJPOT CFJOH USFBUFE BT EJWJEFOET UP UIF FYUFOU PG FBSO
JOWFTUNFOU

*G UIF 'VOE JOWFTUT JO BO .-1 UIF 'VOE XJMM CF SFRVJSFE UP JO
FBDI JUFN PG UIF .-1 T JODPNF HBJO MPTT BOE EFEVDUJPO GPS FBDI
UBYBCMF ZFBS SFHBSEMFTT PG XIFUIFS UIF .-1 EJTUSJCVUFT DBTI UP U
EFUFSNJOJOH XIFUIFS UIF 'VOE IBT TBUJTGJFE UIF EJTUSJCVUJPO SFRV
UIF \$PEF 5IF 'VOE NBZ BT B SFTVMU CF SFRVJSFE UP TFMM JOWFTUNFO
OPU BEWBOUBHFPVT UP EP TP

" DBTI EJTUSJCVUJPO GSPN B QBSUOFSTIJQ JT OPU JUTFMG UBYBC
CBTJT JO JUT QBSUOFSTIJQ JOUFSFTU BOE JT USFBUFE BT DBQJUBM HB
CBTJT JO UIF QBSUOFSTIJQ \$BTI EJTUSJCVUJPOT JG BOZ UIBU UIF 'VO
BO .-1 NBZ FYDFFE UIF OFU UBYBCMF JODPNF BMMPDBUFE UP UIF 'VOE
BNPSUJ[BUJPO BOE EFQMFUJPO UIBU BSF BMMPDBUFE UP UIF 'VOE CZ U

%FQSFJDJBUJPO PS PUIFS DPTU SFDPWFSZ EFEVDUJJPOT QBTTFE UIS
XJMM HFOFSBMMZ SFEVDF UIF 'VOE T DVSSFOU UBYBCMF JODPNF CVU U
NPSF TVCTFRVFOU ZFBST VQPO UIF 'VOE T EJTQPTJUJPO PG JUT JOUFS
XJMM HFOFSBMMZ CF UBYBCMF UP TIBSFIPMEFST BU UIF UJNF PG UIF E
TIBSFIPMEFST NJHIU OPU IBWF IFME TIBSFT JO UIF 'VOE BU UIF UJNF UI
TIBSFIPMEFST XJMM OPU IBWF DPSSFTQPOEJOH FDPOPNDJ HBJO PO UIF
SFDQBQVVSF JODPNF PS UP GVOE SFEFNQUJPO SFRVFTUT UIF 'VOE NBZ
BEWBOUBHFPVT UP EP TP XIJDI NBZ JO SFUVSO SFTVMU JO UIF SFDPHO

/PO DPSQPSBUF UBYQBZFSZ BSF HFOFSBMMZ FMJHJCMF GPS B EFE
QBSUOFSTIJQ JODPNF w 4VCKFDU UP BOZ GVUVSF HVJEBODF UP UIF DPO
SFTQFDU PG JODPNF BMMPDBUFE UP JU CZ BOZ .-1T PS PUIFS QVCMJDM
PTUFOTJCMZ XJMM OPU CF BCMF UP DMBJN TVDI B EFEVDUJPO JO SFTQ

/P \$BQJUBM -PTT \$BSSZGPSXBSET

"T PG %FDFNCFS "QQSFJDJBUJPO 1PSUGPMJP %JWJEFOE 4U
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5BYBUJPO PG /PO 6 4 4IBSFIPMEFST

6OEFS MFHJTMJBUJPO DPNNPOMZ LOPXO BT i'"5\$" w UIF 'VOE JT SFR
QBZT UP TIBSFIPMEFST UIBU GBJM UP NFFU QSFTDSJCFE JOGPSNBUJPO
XJUIIPMEJOH XJMM CF SFRVJSFE XJUI SFTQFDU UP B 6 4 QFSTPO PS OF
CZ UIF 'VOE PS JUT BHFOU PO B WBMJE *34 'PSN 8 PS BQQMJDBCMF *3
XJUIIPMEJOH JODMVEF GPSFJHO GJOBODJBM JOTUJUVUJJPOT i'"*Tw TV
i/'&Tw 5P BWPJE XJUIIPMEJOH VOEFS '"5\$" BO '"* HFOFSBMMZ NVTU F
XIJDI JU BHSFFT UP SFQPSU DFSUBJO JEFUJGZJOH JOGPSNBUJPO JOD
SFTQFDU UP JUT 6 4 BDDPVOU IPMEFST XIJDI JO UIF DBTF PG BO FOU
BOE BO /'& HFOFSBMMZ NVTU JEFUJGZ BOE QSPWJEF PUIFS SFRVJSFE
6 4 PXOFST JG BOZ 4VDI OPO 6 4 TIBSFIPMEFST BMTN NBZ GBMM JOU
FTUBCMJTIFE CZ SFHVMBUJJPOT BOE PUIFS HVJEBODF " OPO 6 4 TIBSFI
BHSFFNFOU XJUI UIF 6 4 UP JNQMFNFOU '"5\$" XJMM CF FYFNQU GSPN '"
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"T B HFOFSBM NBUUFS \$MFBS#SJEHF UBLFT UIF QPTJUJPO UI
VOJU BOE BO JTTVFS F H JOWFTUNFOU NBOBHFNFUO SFMBU
'SBOLMJOBGGJMJBUF EP OPU QSFTFOU B DPOGMJDU PG JOUF
JTTVFS CFDBVTF \$MFBS#SJEHF PQFSBUFT BT BO JOEFQFOEFO
CFDBVTF PG UIF FYJTUFODF PG JOGPSNBUJPOBM CBSSJFST CF
VOJUT "T OPUFE BCPWF \$MFBS#SJEHF FNQMPZFFT BSF VOEF
JODMVEJOH DPOGMJDUT PG JOUFSFTU XIJDI NBZ BSJTF CFDBV
OPO \$MFBS#SJEHF 'SBOLMJOBGGJDFS PS FNQMPZFF UP JOGM
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" MJTU PG JTTVFST XJUI SFTQFDU UP XIJDI \$MFBS#SJEHF IBT
CFIBMG PG DMJFOU BDDPVOUT XJMM CF NBJOUBJOFE CZ \$MFB
QSPYJFT SFMBUJOH UP TVDI JTTVFST VOJUM JU IBT CFFO EFU
NFUIPE GPS SFTPMWJOH UIF DPOGMJDU PG JOUFSFTU IBT CFF
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1SPDFEVSFT GPS "TFTTTJOH .BUFSJBMJUZ PG \$POGMJDUT P
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PUIFST BU \$MFBS#SJEHF T SFRVFTU BT BSF EFTJHOBUFE GS
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"MM DPOGMJDUT PG JOUFSFTU JFOUJGJFE QVSTVBOU UP UIF
BUUFOUJPO PG UIF 1SPYZ \$PNNJUUFF GPS SFTPMVUJPO " QS
\$MFBS#SJEHF QPTJUJPO PO TVDI JTTVF PS JO BDDPSEBODF XJ
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\$MFBS#SJEHF T QPTJUJPO JT UIBU BOZ DPOGMJDU PG JOUFSF
EFUFSNJOFE QPMJDZ PS JO BDDPSEBODF XJUI UIF SFDPNNFOE

5IF 1SPYZ \$PNNJUUFF XJMM EFUFSNJOF XIFUIFS B DPOGMJDU
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BO BTTFTTNFOU PG UIF QBSUJDMBS GBDUT BOE DJSDVNTUBO
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\$ 5IJSE 1BSUZ 1SPYZ 7PUJOH 'JSN \$POGMJDUT PG *OUFSFTU
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7 705*/(10-*\$:
5IFTF BSF QPMJDZ HVJEFMJOFT UIBU DBO BMXBZT CF TVQFSTFEFE TV
CFOFGJDJBM PXOFST PG BDDPVOUT CZ UIF JOWFTUNFOU NBOBHFNF
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" &MFDUJPO PG %JSFDUPST
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B 8F XJUIIPME PVS WPUF GSPN B EJSFDUPS OPNJOFF XI
• BUUFOEFE MFTT UIBO QFSDFOU PG UIF DPNQBOZ T
WBMJE FYDVTF JMMOFTT TFSWJDF UP UIF OBUJPO M
DPNQBOZ
• SFDFJWFE NPSF UIBO QFSDFOU XJUIIFME WPUFT P
FMFDUJPO BOE UIF DPNQBOZ IBT GBJMFE UP BEESF
• JT B NFNCFS PG UIF DPNQBOZ T BVEJU DPNNJUUFF
UP UIF BVEJUPS PS UIFSF BSF DISPOJD DPOUSPM JT
DPOUSPM NFDIBOJTNT
• JT B NFNCFS PG UIF DPNQBOZ T DPNQFOTBUJPO DPN
JHOPSF B TBZ PO QBZ QSPQPTBM UIBU B NBKPSJUZ F
• JT B NFNCFS PG UIF DPNQBOZ T OPNJOBUIJOH DPNNJ
UIF CPBSE PS UIPTF DVSSFOUMZ QSPQPTFE GPS FM
DSJUFSJPO
• JT B NFNCFS PG UIF DPNQBOZ T OPNJOBUIJOH DPNNJ
EJWFSTJUZ PO UIF CPBSE PS UIPTF DVSSFOUMZ QSP
UIBU DSJUFSJPO
C 8F WPUF PO B DBTF CZ DBTF CBTJT JO UIF GPMMPXJO
• *Significant Greenhouse Gas (GHG) Emitters* o 8F XJMM HFOFSBMMZ WPUF B
UIF CPBSE BOE UIF \$IBJS PG UIF SFTQPOTJCMF DPNM
() (FNJUUFST JO DBTFT XISF UIF DPNQBOZ JT OPU U

&TQFDJBMMZ JO UIF DBTF PG BO BQQBSFOU BT PQQPTFE UP BDUVBM
PG JOUFSFTU CZ TBUJTJGZJOH JUTFMG UIBU \$MFBS#SJEHF T QSPQPTFE V
OPU CFJOH JOGMVFODFE CZ UIF DPOGMJDU PG JOUFSFTU

5IJT QPTJUJPO POMZ BQQMJFT UP "OHMP NBSLFUT XIJDI JT EFGJOFE B

B 4VCKFDU UP TVCQBSBHSBQIT BOE CFMPX XF WPUF
JOEFNOJGJDBUJPO BOE MJBCJMJUJZ QSPUFDUJPO

C 8F WPUF GPS QSPQPTBMT UP MJNJU BOE BHBJOTU QSPQ
MJBCJMJUJZ GPS NPOFUBSZ EBNBHFT GPS WJPMBUJOH UIF

D 8F WPUF BHBJOTU JOEFNOJGJDBUJPO QSPQPTBMT UIBU
UP BDUT TVDI BT OFHMJHFODF UIBU BSF NPSF TFSJPVT
DBSFMFTTOFTT

E 8F WPUF GPS POMZ UIPTF QSPQPTBMT UIBU QSPWJEF TV
BCPWF JO DBTFT XIFO B EJSFDUPShT PS PGGJDFShT MFH
GPVOE UP IBWF BDUFE JO HPPE GBJUI BOE JO B NBOOFS
JOUFSFTUT PG UIF DPNQBOZ BOE JG POMZ UIF EJSFDU
%JSFDUPS 2VBMJGJDBUJPO

B 8F WPUF DBTF CZ DBTF PO QSPQPTBMT UIBU FTUBCMJTI
JODMVEF IPX SFBTPOBCMF UIF DSJUFSJB BSF BOE UP XIB
GSPN KPJOJOH UIF CPBSE

C 8F WPUF BHBJOTU TIBSFIPMEFS QSPQPTBMT SFRVJSJOH

1SPYZ \$POUFTUT
7PUJOH GPS %JSFDUPS /PNJOFFT JO \$POUFTUFE &MFDUJPO

8F WPUF PO B DBTF CZ DBTF CBTJT JO DPOUFTUFE FMFDUJF
PG FWFOUT MFBEJOH VQ UP UIF QSPYZ DPOUFTU RVBMJGJD
EJTTJEFOUT GPS JODVNCFOU XIFUIFS UIF CPBSE JT DPN
LFZ DPNNJUUFFT J F OPNJOBUIJOH BVEJU DPNQFOTBUJPO
EJTDVTTJPO XJUI UIF SFTQFDUJWF QPSUGPMJP NBOBHFS T
3FJNCVSTF 1SPYZ 4PMJDJUBUJPO &YQFOTFT

8F WPUF PO B DBTF CZ DBTF CBTJT PO QSPQPTBMT UP QSPV
QSPYZ DPOUFTU \$POTJEFSBUJPO JODMVEF JFOUJUJZ PG
TPMJDJUBUJPO QFSDFOUBHF UIBU XJMM CF QBJE UP QSPYZ

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8F WPUF GPS QSPQPTBMT UP SBUJGZ BVEJUPST VOMFTT BC
UIF DPNQBOZ BOE JT UIFSFGPSF OPU JOEFQFOEFOU PS UI
BVEJUPS IBT SFOEFSFE BO PQJOJPO UIBU JT OFJUIFS BDDV
QPTJUJPO PS UIFSF JT SFBTPO UP CFMJFWF UIF JOEFQFOEF
FUIJDBM DPOEVDU 4QFDJGJDBMMZ XF XJMM WPUF UP SBU
BVEJU TFSWJDFT BOE TVDI PUIFS BVEJU SFMBUFE BOE OPO
TVDI BVEJUPST UP MPTF UIFJS JOEFQFOEFODF VOEFS BQQM

'JOBODJBM 4UBUFNFOUT BOE %JSFDUPS BOE "VEJUPS 3FQP

8F HFOFSBMMZ WPUF GPS NBOBHFNFOU QSPQPTBMT TFFLJO
UIF EJTDIBSHF PG NBOBHFNFOU BOE TVQFSWJTPSZ CPBSE N
BDUJPO PG UIF DPNQBOZ T BVEJUPST PS EJSFDUPST

3FNVOFSBUJPO PG "VEJUPST

8F WPUF GPS QSPQPTBMT UP BVUIPSJ[F UIF CPBSE PS BO B
SFNVOFSBUJPO PG BVEJUPST VOMFTT UIFSF JT FWJEFODF
OBUVSF PG UIF DPNQBOZ

*OEFNOJGJDBUJPO PG "VEJUPST

8F WPUF BHBJOTU QSPQPTBMT UP JOEFNOJGZ BVEJUPST

% 1SPYZ \$POUFTU %FGFOTFT

#PBSE 4USVDUVSF 4UBHHFSFE WT "OOVBM &MFDUJPOT

B 8F WPUF BHBJOTU QSPQPTBMT UP DMBTTJGZ UIF CPBSE

C 8F WPUF GPS QSPQPTBMT UP SFQFBM DMBTTJGJFE CPBS

4IBSFIPMEFS "CJMJUZ UP 3FNPWF %JSFDUPST

8F WPUF GPS QSPQPTBMT UIBU TFFL UP CSJOH GPSUI PUIFS
"EKPVSO .FFUJOH

8F WPUF PO B DBTF CZ DBTF CBTJT PO QSPQPTBMT UIBU TF
TPMJDJU BEEJUUPOBM WPUFT

-BDL PG *OGPSNBUJPO

8F WPUF BHBJOTU QSPQPTBMT JG B DPNQBOZ GBJMT UP QS
XIJDI UP CBTF UIFJS WPUJOH EFDJTJPO

(\$BQJUBM 4USVDUVSF

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B 8F WPUF PO B DBTF CZ DBTF CBTJT PO QSPQPTBMT UP
TUPDL BVUIPSJ[FE GPS JTTVF FYDFQU BT EFTDSJCFE J

C 4VCKFDU UP QBSBHSBQI CFMPX XF WPUF GPS UIF B
TIBSFT JG UIF DPNQBOZ NFFUT DFSUBJO DSJUFSJB

• \$PNQBOZ IBT BMSFBEZ JTTVFE B DFSUBJO QFSDFOUB
DPNQBOZHT BMMPUNFOU

• 5IF QSPQPTFE JODSFBTF JT SFBTPOBCMF J F MFTT
BO BOBMZTJT PG UIF DPNQBOZHT IJTUPSJDBM TUPDL
DPNQBOZ

D 8F WPUF PO B DBTF CZ DBTF CBTJT CBTFE PO UIF JO
JT HSFBUFS UIBO PG BO BDDPVOU

4UPDL %JTUSJCVUJPO 4QMJUT BOE %JWJEFOET

8F WPUF PO B DBTF CZ DBTF CBTJT PO NBOBHFNFOU QSPQP
B TUPDL TQMJU QSPWJEFE UIBU UIF TQMJU EPFT OPU SFTV
NPSF UIBO BGUFS HJWJOH FGGFDU UP UIF TIBSFT OFFE

3FWFSTF 4UPDL 4QMJUT

8F WPUF GPS NBOBHFNFOU QSPQPTBMT UP JNQMFNFOU B SF
EPFT OPU SFTVMU JO BO JODSFBTF PG BVUIPSJ[FE CVU VOJ
UP UIF TIBSFT OFFEFE GPS UIF SFWFSTF TQMJU

#MBOL \$IFDL 1SFGFSSFE 4UPDL

B 8F WPUF BHBJOTU QSPQPTBMT UP DSFBUF BVUIPSJ
SFHBSE UP CMBOL DIFDL QSFGFSSFE TUPDL XJUI VO
EJTUSJCVUJPO BOE PUIFS SJHIUT

C 8F WPUF GPS QSPQPTBMT UP DSFBUF iEFDMBXFEW C
DBOOPU CF VTFE BT B UBLFPWFS EFGFOTF

D 8F WPUF GPS QSPQPTBMT UP BVUIPSJ[F QSFGFSSFE
UIF WPUJOH EJWJEFOE DPOWFSTJPO BOE PUIFS SJ
QSFGFSSFE TUPDL BQQFBS SFBTPOBCMF

E 8F WPUF GPS QSPQPTBMT SFRVJSJOH B TIBSFIPMEF
JTTVFT

"EKVTU 1BS 7BMVF PG \$PNNPO 4UPDL

8F WPUF GPS NBOBHFNFOU QSPQPTBMT UP SFEVDF UIF QBS

1SFFNQJWF 3JHIUT

0#3" 3FMBUFE \$PNQFOTBUJPO 1SPQPTBMT
B "NFOENFOUT UIBU 1MBDF B \$BQ PO "OOVBM (SBOU PS "N
8F WPUF GPS QMBOT UIBU TJNQMZ BNFOE TIBSFIPMEFS B
PS QMBDF B DBQ PO UIF BOOVBM HSBOUT BOZ POF QBSUJ
PG 4FDUJPO N PG UIF *OUFSOBM 3FWFOVF \$PEF
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8F WPUF GPS BNFOENFOUT UP BEE QFSGPSNBODF HPBMT
UIF QSPWJTJPOT PG 4FDUJPO N PG UIF *OUFSOBM 3FW
D "NFOENFOUT UP *ODSFBTF 4IBSFT BOE 3FUBJO 5BY %FEV
8F WPUF GPS BNFOENFOUT UP FYJTUJOH QMBOT UP JODS
GBWPSBCMF UBY USFBUNFOU VOEFS UIF QSPWJTJPOT PG
E "QQSPWBM PG \$BTI PS \$BTI BOE 4UPDL #POVT 1MBOT
8F WPUF GPS DBTI PS DBTI BOE TUPDL CPOVT QMBOT UP FY
QSPWJTJPOT PG 4FDUJPO N PG UIF *OUFSOBM 3FWFOVF
&YQFOTJOH PG 0QUJPOT
8F WPUF GPS QSPQPTBMT UP FYQFOTF TUPDL PQUJPOT PO C
4IBSFIPMEFS 1SPQPTBMT UP -JNJU &YFDVUJWF BOE %JSFDU
B 8F WPUF PO B DBTF CZ DBTF CBTJT PO BMM TIBSFIPMEF
FYFDVUJWF BOE EJSFDUPS QBZ JOGPSNBUJPO \$POTJEFS
WPUF GPS TVDI QSPQPTBMT JG BEEJUJPOBM EJTDMPVTF
QVU UIF DPNQBOZ BU B DPNQFUJUJWF EJTBEBWBOUBHF SF
C 8F WPUF PO B DBTF CZ DBTF CBTJT PO BMM PUIFS TIBSF
EJSFDUPS QBZ
3FQPSUT UP "TTFTT UIF 'FBTJCJMJUJ PG *ODMVEJOH 4VTUB
8F WPUF JO GBWPS PG OPO CJOEJOH QSPQPTBMT GPS SFQPSU
QFSGPSNBODF NFUSJD GPS TFOJPS FYFDVUJWF DPNQFOTBUJP
8F IBWF B QPMJDZ PG WPUJOH UP SFBTPOBCMZ MJNJU UIF MFV
BSSBOHFNFOUT BWBJMBCMF UP NBOBHFNFOU UP SFBTPOBCMZ
DPNQFOTBUJPO 'PS PQUJPOT BOE FRVJUJ CBTFE DPNQFOTBU
BNFOENFOUT UIBU XPVME SFTVMU JO UIF BWBJMBCMF BXBSET
TIBSFT J F JG UIF DPNCJOFE UPUBM PG TIBSFT DPNNPO TIB
VOEFS BMM DVSSFOU BOE QSPQPTFE DPNQFOTBUJPO QMBOT J
BWBJMBCMF BXBSET FYDFFE UIF UISFTIPME XF XPVME BMT
PG JUT TQFDJGJD JOEVTUSZ F H UFDIOPMPHZ GJSNT OUIFS
GPMMPXJOH
• \$PNQFOTBUJPO DPNNJUUFF DPNQSJTTFE PG JOEFQFOEFOU
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8E 3FQPSUT CH XJUJPU TIBSFIPMEFS \$BQ QSPWBM QUPJOT

(PMEFO 1BSBDIVUFT

B 8F WPUF GPS TIBSFIPMEFS QSPQPTBMT UP IBWF HPMEFO
SBUJGJDBUJPO

• 5IFSF JT OP EJTDVPOU PO UIF TUPDL QSDJDF PO QVSDIE
 *G UIF BCPWF EP OPU BQQMZ XF WPUF BHBJOTU UIF OP
 L &NQMPZFF #FOFGJU 1MBOT
 8F WPUF GPS QSPQPTBMT UP JNQMFNFOU B L TBWJOHT
 4UPDL \$PNQFOTBUJPO 1MBOT
 B 8F WPUF GPS TUPDL DPNQFOTBUJPO QMBOT XIJDI QSPWJ
 C 8F WPUF PO B DBTF CZ DBTF CBTJT GPS TUPDL DPNQFOT
 EPMMBS DBTI GPS TUPDL FYDIBOHF VTJOH B RVBOUJUBUJ
 %JSFDUPST 3FUJSFNFOU 1MBOT
 B 8F WPUF BHBJOTU SFUJSFNFOU QMBOT GPS OPO FNQMPZ
 C 8F WPUF GPS TIBSFIPMEFS QSPQPTBMT UP FMJNJOBUS
 .BOBHFNFOU 1SPQPTBMT UP 3FQSJDF 0QUJPOT
 8F WPUF BHBJOTU NBOBHFNFOU QSPQPTBMT TFFLJOH BQQS
 4IBSFIPMEFS 1SPQPTBMT 3FHBSEJOH &YFDVUJWF BOE %JSF
 B 8F WPUF BHBJOTU TIBSFIPMEFS QSPQPTBMT TFFLJOH UP
 PUIFSXJTF EJDUBUF UIF BNPVOU PS GPSN PG DPNQFOTBU
 C 8F WPUF BHBJOTU TIBSFIPMEFS QSPQPTBMT SFRVJSJOH
 D 8F WPUF BHBJOTU TIBSFIPMEFS QSPQPTBMT UP FMJNJOE
 DIBOHF PG DPOUSPM
 E 8F WPUF GPS TIBSFIPMEFS QSPQPTBMT UP QVU PQUJPO
 F 8F WPUF GPS TIBSFIPMEFS QSPQPTBMT UIBU DBMM GPS
 PO QBZw \$PNQBOZ CPBSET XPVME BEPQU B QPMJDZ HJV
 NFFUJOH UP WPUF PO BO BEWJTPSZ SFTPMVUJPO UP SBU
 PGGJDFST TFU GPSUI JO UIF QSPYZ TUBUFNFOU T TVNNBS
 G 8F WPUF iBOOVBMw GPS UIF GSFRVFODZ PG TBZ PO QBZ
 ZFBST
 H 8F WPUF PO B DBTF CZ DBTF CBTJT GPS BMM PUIFS TIBS
 EJSFDUPS QBZ UBLJOH JOUP BDDPVOU DPNQBOZ QFSGPS
 JOEVTUSZ BOE MPOH UFSN DPSQPSBUF PVUMPL
 .BOBHFNFOU 1SPQPTBMT PO &YFDVUJWF \$PNQFOTBUJPO
 'PS OPO CJOEJOH BEWJTPSZ WPUFT PO FYFDVUJWF PGGJDF
 TFSWJDF QSPWJEFS BHSFF XF WPUF GPS UIF QSPQPTBM 8
 EJTBHSFF UIF QSPQPTBM CFDPNFT B SFGFS JUFN *O UIF D
 DPOTJEFSBUJPO XJMM JODMVEF UIF GPMMPXJOH
 • \$PNQBOZ QFSGPSNBODF PWFS UIF MBTU BOE ZFBS
 • 1FSGPSNBODF NFUSJDT GPS TIPSU BOE MPOH UFSN JODF
 • \$&0 QBZ SFMBUJWF UP DPNQBOZ QFSGPSNBODF JT UIFSF
 • 5BY HSPTT VQT UP TFOJPS FYFDVUJWF
 • \$IBOHF JO DPOUSPM BSSBOHFNFOUT

- 1SFTFODF PG B DMBXCBDL QSPWJTJPO PXOFSTIJQ HVJEF
FYFDVUJWFT
4UPDL 3FUFOUJPO)PMEJOH 1FSJPE PG &RVJUJZ "XBSET
8F WPUF PO B DBTF CZ DBTF CBTJT PO TIBSFIPMEFS QSPQP
TFOJPS FYFDVUJWFT UP SFUBJO BMM PS B TJHOJGJDBOU
FRVJUJZ DPNQFOTBUJPO QMBOT FJUIFS
- 8IJMF FNQMPZFE BOE PS GPS POF UP UXP ZFBST GPMMPX
- 'PS B TVCTUBOUJBM QFSJPE GPMMPXJOH UIF MBQTF PG B
SBUBCMF SFMFBTF PG B QPSUJPO PG UIF TIBSFT BOOVBM
5IF GPMMPXJOH GBDUPST XJMM CF UBLFO JOUP DPOTJEFSB
- 8IFUIFS UIF DPNQBOZ IBT BOZ IPMEJOH QFSJPE SFUFOUJ
PXOFSTIJQ SFRVJSFNFOUT DVSSFOUMZ JO QMBDF
- "DUVBM TUPDL PXOFSTIJQ PG UIF DPNQBOZ T OBNFE FYFD
- 1PMJDJFT BJNFE BU NJUJHBUJOH SJTL UBLJOH CZ TFOJPS
- 1BZ QSBDUJDFT BU UIF DPNQBOZ UIBU XF EFFN QSPCMFN

* 4UBUF \$PVOUSZ PG *ODPSQPSBUJPO
7PUJOH PO 4UBUF 5BLFPWFS 4UBUVUFT
B 8F WPUF GPS QSPQPTBMT UP PQU PVU PG TUBUF GSFF[F
C 8F WPUF GPS QSPQPTBMT UP PQU PVU PG TUBUF EJTHPS
7PUJOH PO 3F JODPSQPSBUJPO 1SPQPTBMT
8F WPUF PO B DBTF CZ DBTF CBTJT PO QSPQPTBMT UP DIBOHF

G 8F WPUF BHBJOTU QSPQPTBMT UP BQQSPWF PUIFS CVTJ
3PVUJOF "HFOEB *UFNT
*O TPNF NBSLFUT TIBSFIPMEFST BSF SPVUJOFMZ BTLFE UP
• UIF PQFOJOH PG UIF TIBSFIPMEFS NFFUJOH
• UIBU UIF NFFUJOH IBT CFFO DPOWFOFE VOEFS MPDBM
• UIF QSFTFODF PG B RVPSVN
• UIF BHFOEB GPS UIF TIBSFIPMEFS NFFUJOH
• UIF FMFDUJPO PG UIF DIBJS PG UIF NFFUJOH
• SFHVMBUPSZ GJMJOHT
• UIF BMMPXBODF PG RVFTUJPO
• UIF QVCMJDBUJPO PG NJOVUFT
• UIF DMPTJOH PG UIF TIBSFIPMEFS NFFUJOH
8F HFOFSBMMZ WPUF GPS UIFTF BOE TJNJMBS SPVUJOF
"MMPDBUJPO PG *ODPNF BOE %JWJEFOET
8F HFOFSBMMZ WPUF GPS NBOBHFNFUO QSPQPTBMT DPODFS
EJWJEFOET VOMFTT UIF BNPVOU PG UIF EJTUSJCVUJPO JT
4UPDL 4DSJQ %JWJEFOE "MUFSOBUJWFT
B 8F WPUF GPS NPTU TUPDL TDSJQ EJWJEFOE QSPQPTBM
C 8F WPUF BHBJOTU QSPQPTBMT UIBU EP OPU BMMPX GPS
UIBU UIF DBTI PQUJPO JT IBSNGVM UP TIBSFIPMEFS WBMV
\$MFBS#SJEHF IBT EFUFSNJOFE UIBU SFHJTUFSFE JOWFTUNFOU
DPNQBOJFT SBJTF TQFDJBM QPMJDZ JTTVFT NBLJOH TQFDJGJ
FYUFOU UIBU \$MFBS#SJEHF IBT QSPYZ WPUJOH BVUIPSJUJZ XJU
\$MFBS#SJEHF TIBMM WPUF TVDI TIBSFT JO UIF CFTU JOUFSFTU
QSJODJQMFT TFU GPSUI IFSFJO XJUJIPVU SFHBSE UP UIF TQFD
5IF WPUJOH QPMJDZ HVJEFMJOFT TFU GPSUI IFSFJO XJMM CF
JUT TPMF EJTDSFUJPO

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05)&3 \$0/4*%&3"5*0/4
*O DFSUBJO TJUVBUJPO \$MFBS#SJEHF NBZ EFUFSNJOF OPU UP W
UIBU UIF FYQFDUFE CFOFGJU UP UIF DMJFOU PG WPUJOH TIBSFT JT
TJUVBUJPO JO XIJDI \$MFBS#SJEHF NBZ EFUFSNJOF OPU UP WPUF
" 4IBSF #MPDLJOH
1SPYZ WPUJOH JO DFSUBJO DPVOUSJFT SFRVJSFT iTIBSF CMPDL
QSPYJFT NVTU EFQPTJU UIFJS TIBSFT TIPSUMZ CFGPSF UIF EBUF
EFQPTJUBSZ %VSJOH UIF CMPDLJOH QFSJPE TIBSFT UIBU XJMM
IBT UBLFO QMBDF BOE UIF TIBSFT IBWF CFFO SFUVSOFE UP DMJF
XIFUIFS UP WPUF TIBSFT TVCKFDU UP TIBSF CMPDLJOH \$MFBS#S
GBDUT BOE DJSDVNTUBODFT UIF FYQFDUFE CFOFGJU UP DMJFOU
CFJOH BCMF UP TFMM TVDI TIBSFT EVSJOH UIF BQQMJDBC MF QFS

*O MJFV PG LFFQJOH DPQJFT PG QSPYZ TUBUFNFOUT \$MFBS#SJI
TZTUFN BT XFMM BT PO UIJSE QBSUZ SFDPSET PG QSPYZ TUBUFN
VOEFSUBLJOH UP QSPWJEF UIF EPDVNFOUT QSPNQUMZ VQPO SFF

5IF TG JOEJDBUPS GPS TUSVDUVSFE GJOBODF TFDVSJUZ SBUJOHT
GVOEBNFOUBM TFDVSJUJFT NBZ IBWF EJGGFSFOU SJTL DIBSBDUFSJTUJD
BDIJFWF CSPBE FYQFDUFE FRVJWBMFODF JO TUSVDUVSFE GJOBODF BOE
QFSJPE PG UJNF

%FTDSJQUJPO PG .PPEZ T *OWFTUPST 4FSWJDF *OD T (MPCBM -POH
"BB%0CMJHBUJPOT SBUFE "BB BSF KVEHFE UP CF PG UIF IJHIFTU R
"B%0CMJHBUJPOT SBUFE "B BSF KVEHFE UP CF PG IJHI RVBMJUZ BO
"%0CMJHBUJPOT SBUFE " BSF KVEHFE UP CF VQQFS NFEJVN HSBEP
#BB%0CMJHBUJPOT SBUFE #BB BSF KVEHFE UP CF NFEJVN HSBEP B
QPTTFTT DFSUBJO TQFDVMBUJWF DIBSBDUFSJTUJDT
#B%0CMJHBUJPOT SBUFE #B BSF KVEHFE UP CF TQFDVMBUJWF BOE
#%0CMJHBUJPOT SBUFE # BSF DPOTJEFSFE TQFDVMBUJWF BOE BSF
\$BB%0CMJHBUJPOT SBUFE \$BB BSF KVEHFE UP CF TQFDVMBUJWF P
\$B%0CMJHBUJPOT SBUFE \$B BSF IJHIMZ TQFDVMBUJWF BOE BSF MJ
PG QSJODJQBM BOE JOUFSFTU
\$%0CMJHBUJPOT SBUFE \$ BSF UIF MPXFTU SBUFE BOE BSF UZQJDB
JOUFSFTU

Note: Moody's appends numerical modifiers 1, 2, and 3 to each generic rating classification from Aa through Caa. The

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##% "O PCMJHBUJPO SBUFE i##w JT MFTT WVMOF SBCMF UP OPOQBZ
POHPJOH VODFSUBJOUJFT PS FYQPTVSF UP BEWFSTF CVTJOFTT G
PCMJHPS T JOBEFRVBUF DBQBDJUZ UP NFFU JUT GJOBODJBM DPNN

#% "O PCMJHBUJPO SBUFE i#w JT NPSF WVMOF SBCMF UP OPOQBZNF
IBT UIF DBQBDJUZ UP NFFU JUT GJOBODJBM DPNNJUNFOUT PO UIF
DPOEJUJPOT XJMM MJLFMZ JNQBJS UIF PCMJHPS T DBQBDJUZ PS X

\$\$\$% "O PCMJHBUJPO SBUFE i\$\$\$w JT DVSSFOUMZ WVMOF SBCMF UP
GJOBODJBM BOE FDPOP NJD DPOEJUJPOT GPS UIF PCMJHPS UP NFF
BEWFSTF CVTJOFTT GJOBODJBM PS FDPOP NJD DPOEJUJPOT UIF P
DPNNJUNFOUT PO UIF PCMJHBUJPO

\$\$% "O PCMJHBUJPO SBUFE i\$\$w JT DVSSFOUMZ IJHIMZ WVMOF SBCM
5IF i\$\$w SBUJOH JT VTFE XIFO B EFGVMU IBT OPU ZFU PDDVSSFE

)PXFVFS BOZ TUBUFE HSBDF QFSJPE MPOHFS UIBO GJWF CVTJOFTT EB
VTFE VQPO UIF GJMJOH PG B CBOLSVQUDZ QFUJUIPO PS UIF UBLJOH PG
DFSUBJOUZ GPS FYBNQMF EVF UP BVUPNBUJD TUBZ QSPWJTJPOT " SBU
EFCU SFTUSVDUVSJOH

%FTDSJQUJPO PG 4 1 (MPCBM 3BUJOHT .VOJDJQBM 4IPSU 5FSN /PUF 3B

"O 4 1 (MPCBM 3BUJOHT 6 4 NVOJDJQBM OPUF SBUJOH SFGMFDUT
NBSLFU BDDFTT SJTLT VOJRVF UP UIF OPUFT /PUFT EVF JO UISFF ZFBS
NBUVSJUZ PG NPSF UIBO UISFF ZFBST XJMM NPTU MJLFMZ SFDFJWF B M
BTTJHO 4 1 (MPCBM 3BUJOHT BOBMZTJT XJMM SFWJFX UIF GPMMPXJOH

• "NPSUJ[BUJPO TDIFEVMF%oUIF MBSHFS UIF GJOBM NBUVSJUZ SFMBUJW
BOE
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\$\$ "O PCMJHPS SBUFE i\$\$w JT DVSSFOUMZ IJHIMZ WVMOF SBCMF
PDDVSSFE CVU 4 1 (MPCBM 3BUJOHT FYQFDUT EFGBVMU UP CF
UP EFGBVMU

4% BOE % "O PCMJHPS JT SBUFE i4%w TFMFDUJWF EFGBVMU PS i%
POF PS NPSF PG JUT GJOBODJBM PCMJHBUJPOT XIFUIFS MPOH PS TIPS
JOTUSVNFOUT DMBTTJGJFE BT SFHVMBUPSZ DBQJUBM PS JO OPOQBZNF
3BUJOHT CFMJFWFT UIBU UIF EFGBVMU XJMM CF B HFOFSBM EFGBVMU B
PCMJHBUJPOT BT UIFZ DPNF EVF "O i4%w SBUJOH JT BTTJHOFE XIFO 4
EFGBVMUFE PO B TQFDJGJD JTTVF PS DMBTT PG PCMJHBUJPOT CVU JU X
PG PCMJHBUJPOT JO B UJNFMZ NBOOFS " SBUJOH PO BO PCMJHPS JT M
SFTUSVDUVSJOH

3BUJOHT GSPN i""w UP i\$\$\$w NBZ CF NPEJGJFE CZ UIF BEEJUJPO P
XJUIJO UIF SBUJOH DBUFHPSJFT

4IPSU 5FSN *TTVFS \$SFEJU 3BUJOHT

" "O PCMJHPS SBUFE i" w IBT TUSPOH DBQBDJUZ UP NFFU JUT
DBUFHPSZ CZ 4 1 (MPCBM 3BUJOHT 8JUIJO UIJT DBUFHPSZ D
5IJT JOEJDBUFT UIBU UIF PCMJHPS T DBQBDJUZ UP NFFU JUT

" "O PCMJHPS SBUFE i" w IBT TBUJTGBDUPSZ DBQBDJUZ UP NF
NPSF TVTDFQUJCMF UP UIF BEWFSTF FGGFDUT PG DIBOHFT JO
JO UIF IJHIFTU SBUJOH DBUFHPSZ

" "O PCMJHPS SBUFE i" w IBT BEFRVBUF DBQBDJUZ UP NFFU JU
DPOEJUJPO PS DIBOHJOH DJSDVNTUBODFT BSF NPSF MJLFMZ
DPNNJUNFOUT

"O PCMJHPS SBUFE i#w JT SFHBSEFE BT WVMOF SBCMF BOE IB
DVSSFOUMZ IBT UIF DBQBDJUZ UP NFFU JUT GJOBODJBM DPNN
UIBU DPVME MFBE UP UIF PCMJHPS T JOBEFRVBUF DBQBDJUZ

\$ "O PCMJHPS SBUFE i\$w JT DVSSFOUMZ WVMOF SBCMF UP OPOC
BOE JT EFQFOEFOU VQPO GBWPSBCMF CVTJOFTT GJOBODJBM
DPNNJUNFOUT

4% BOE % "O PCMJHPS JT SBUFE i4%w TFMFDUJWF EFGBVMU PS i%
POF PS NPSF PG JUT GJOBODJBM PCMJHBUJPOT XIFUIFS MPOH PS TIPS
JOTUSVNFOUT DMBTTJGJFE BT SFHVMBUPSZ DBQJUBM PS JO OPOQBZNF
3BUJOHT CFMJFWFT UIBU UIF EFGBVMU XJMM CF B HFOFSBM EFGBVMU B
PCMJHBUJPOT BT UIFZ DPNF EVF "O i4%w SBUJOH JT BTTJHOFE XIFO 4
EFGBVMUFE PO B TQFDJGJD JTTVF PS DMBTT PG PCMJHBUJPOT CVU JU X
PG PCMJHBUJPOT JO B UJNFMZ NBOOFS " SBUJOH PO BO PCMJHPS JT M
SFTUSVDUVSJOH

%FTDSJQUJPO PG 4 1 (MPCBM 3BUJOHT %VBM 3BUJOHT

%VBM SBUJOHT NBZ CF BTTJHOFE UP EFCU JTTVFT UIBU IBWF B QV
SBUJOH BEESFTTFT UIF MJLFMJIPPE PG SFQBZNFU PG QSJODJQBM BOE
POMZ UIF EFNBOE GFBVVSF 5IF GJSTU DPNQPOFOU PG UIF SBUJOH DBO
BDDPSEJOHMZ VTF FJUIFS TIPSU UFSN PS MPOH UFSN SBUJOH TZNCPM
JT BTTJHOFE B TIPSU UFSN SBUJOH TZNCPM GPS FYBNQMF i"" " w PS
UIF 6 4 NVOJDJQBM TIPSU UFSN OPUF SBUJOH TZNCPM BSF VTFE GPS

%FTDSJQUJPO PG 4 1 (MPCBM 3BUJOHT "DUJWF 2VBMJGJFST

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4 1 (MPCBM 3BUJOHT VTFT UIF GPMMPXJOH RVBMJGJFST UIBU MJNJ

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"T B SFTVMU JOEJWJEVBM PCMJHBUJPOT PG FOUJUJFT TVDI BT DF
UIBU FOUJUZ T JTTVFS SBUJOH PS *%3 FYDFQU %*1 PCMJHBUJPO SBUJO
TDBMF 'JUDI QVCMJTIFT FYQMJDJU 3FDPWFSZ 3BUJOHT JO NBOZ DBTFT

"")JHIFTU \$SFEJU 2VBMJUZ i""w SBUJOHT EFOPUF UIF MPXFTU F
DBTFT PG FYDFQUJPOBMMZ TUSPOH DBQBDJUZ GPS QBZNFOU PG GJOBO
BGGFDFUFE CZ GPSFTFFBCMF FWFOUT

" 7FSZ)JHI \$SFEJU 2VBMJUZ i"w SBUJOHT EFOPUF FYQFDUBUJPO
DBQBDJUZ GPS QBZNFOU PG GJOBODJBM DPNNJUNFOUT 5IJT DBQBDJUZ

")JHI \$SFEJU 2VBMJUZ i"w SBUJOHT EFOPUF FYQFDUBUJPO PG M
DPNNJUNFOUT JT DPOTJEFSFE TUSPOH 5IJT DBQBDJUZ NBZ OFWFSUIFM
DPOEJUJPO UIBO JT UIF DBTF GPS IJHIFS SBUJOHT

(PPE \$SFEJU 2VBMJUZ i###w SBUJOHT JOEJDBUF UIBU FYQFDU
QBZNFOU PG GJOBODJBM DPNNJUNFOUT JT DPOTJEFSFE BEFRVBUF CVU
UIJT DBQBDJUZ

4QFDVMBUJWF i#w SBUJOHT JOEJDBUF BO FMFWBUFE WVMOF S
DIBOHFT JO CVTJOFTT PS FDPOPNJD DPOEJUJPO PWFS UJNF IPXWFS
GJOBODJBM DPNNJUNFOUT UP CF NFU

)JHIMZ 4QFDVMBUJWF i#w SBUJOHT JOEJDBUF UIBU NBUFSJBM D

\$\$\$ 4VCTUBOUJBM \$SFEJU 3JTL i\$\$\$w SBUJOHT JOEJDBUF UIBU TV

\$\$ 7FSZ)JHI -FWFMT PG \$SFEJU 3JTL i\$\$w SBUJOHT JOEJDBUF WF

\$ &YDFQUJPOBMMZ)JHI -FWFMT PG \$SFEJU 3JTL i\$w JOEJDBUFT F

5IF SBUJOHT PG DPSQPSBUF GJOBODF PCMJHBUJPOT BSF MJOLFE U
GPS CBOLT BOE OPO CBOL GJOBODJBM JOTUJUJUPOT CZ J SFDPWFSZ
BTTJHOFE JO UIF DBTF PG MPX TQFDVMBUJWF HSBEF JTTVFST BOE JJ G
QFSGPSNBODF SJTL SFMBUJWF UP UIF SJTL DBQUVSFE JO UIF *%3 PS 7J

'PS QFSGPSNJOH PCMJHBUJPOT UIF PCMJHBUJPO SBUJOH SFQSFTF
SFDPWFSJFT PO UIF DSFEJU SJTL TIPVME B EFGBVMU PDDVS

*G UIF PCMJHBUJPO SBUJOH JT IJHIFS UIBO UIF SBUJOH PG UIF JTT
FWFOU PG EFGBVMU *G UIF PCMJHBUJPOT SBUJOH JT MPXFS UIBO UIF S
EFGBVMU PDDVS

3BUJOHT JO UIF DBUFHPSJFT PG i\$\$\$w i\$\$w BOE i\$w DBO BMTF SF
DBTF UIF SBUJOH EPFT OPU PQJOF PO EFGBVMU SJTL CVU SFGMFDUT U
%FTDSJQUJPO PG 'JUDI 3BUJOHT *TTVFS %FGBVMU 3BUJOHT

3BUFE FOUJUJFT JO B OVNCFS PG TFDUPST JODMVEJOH GJOBODJBM
DPNQBOJFT BOE DFSUBJO TFDUPST XJUIJO QVCMJD GJOBODF BSF HFOF
FOUFSQSJTFT JO HMPCBM JOGSBTUSVDUVSF QSPKFDU GJOBODF BOE QV

"")JHIFTU \$SFEJU 2VBMJUZ i""w SBUJOHT EFOPUF UIF MPXFTU F
DBTFT PG FYDFQUJPOBMMZ TUSPOH DBQBBDJUZ GPS QBZNFUO PG GJOBO
BGGFDUFE CZ GPSFTFFBCMF FWFOUT

" 7FSZ)JHI \$SFEJU 2VBMJUZ i"w SBUJOHT EFOPUF FYQFDUBUJPO
DBQBBDJUZ GPS QBZNFUO PG GJOBODJBM DPNNJUNFOUT 5IJT DBQBBDJUZ

")JHI \$SFEJU 2VBMJUZ i"w SBUJOHT EFOPUF FYQFDUBUJPO PG M
DPNNJUNFOUT JT DPOTJEFSFE TUSPOH 5IJT DBQBBDJUZ NBZ OFWFSUIFM
DPOEJUJPO UIBO JT UIF DBTF GPS IJHIFS SBUJOHT

(PPE \$SFEJU 2VBMJUZ i###w SBUJOHT JOEJDBUF UIBU FYQFDU
QBZNFUO PG GJOBODJBM DPNNJUNFOUT JT DPOTJEFSFE BEFRVBUF CVU
UIJT DBQBBDJUZ

4QFDVMBUJWF i#w SBUJOHT JOEJDBUF BO FMFWBUFE WVMOF
DIBOHFT JO CVTJOFTT PS FDPOPNJD DPOEJUJPO PWFS UJNF IPXFWFS
PG GJOBODJBM DPNNJUNFOUT

)JHIMZ 4QFDVMBUJWF i#w SBUJOHT JOEJDBUF UIBU NBUFSJBM E
'JOBODJBM DPNNJUNFOUT BSF DVSSFOUMZ CFJOH NFU IPXFWFS DBQBD
CVTJOFTT BOE FDPOPNJD FOWJSPONFOU

\$\$\$ 4VCTUBOUJBM \$SFEJU 3JTL 7FSZ MPX NBSHJO GPS TBGFUZ %

\$\$ 7FSZ IJHI MWFMT PG DSFEJU SJTL %FGBVMU PG TPNF LJOE BO

\$ /FBS EFGBVMU " EFGBVMU PS EFGBVMU MJLF QSPDFTT IBT CFHV
WFIJDMF QBZNFUO DBQBBDJUZ JT JSSFWPDBCMZ JNQBJSFE \$POEJUJPO

- 5IF JTTVFS IBT FOUFSFE JOUP B HSBDF PS DVSF QFSJPE GPMMPXJOH C
- 5IF JTTVFS IBT FOUFSFE JOUP B UFNQPSBSZ OFHPUJBUFE XBJWFS PS T
GJOBODJBM PCMJHBUJPO
- 5IF GPSNBM BOOPVODFNFOU CZ UIF JTTVFS PS UIFJS BHFOU PG B EJTU
- " DMPTFE GJOBODJOH WFIJDMF XIFS QBZNFUO DBQBBDJUZ JT JSSFWPD
QJODJQBM JO GVMM EVSJOH UIF MJGF PG UIF USBOTBDUJPO CVU XIF

3% 3FTUSJDUFE %FGBVMU i3%w SBUJOHT JOEJDBUF BO JTTVFS UI

- "O VODVSFE QBZNFUO EFGBVMU PS EJTUSFTTTFE EFCU FYDIBOHF PO B C
-)BT OPU FOUFSFE JOUP CBOLSVQUDZ GJMJOHT BENJOJTUSBUJPO SFD
IBT OPU PUIFSXJTF DFBTFE PQFSBUJOH 5IJT XPVME JODMVEF
 - 5IF TFMFDUJWF QBZNFUO EFGBVMU PO B TQFDJGJD DMBTT PS D
 - 5IF VODVSFE FYQJSZ PG BOZ BQQMJDBCMF HSBDF QFSJPE DVS
QBZNFUO EFGBVMU PO B CBOL MPBO DBQJUBM NBSLFUT TFDVS
 - 5IF FYUFOTJPO PG NVMUJQMF XBJWFST PS GPSCFBSBODF QFSJF
GJOBODJBM PCMJHBUJPO FJUIFS JO 0 OU PG GÐ` €PQQ ð@ E

*O BMM DBTFT UIF BTTJHONFOU PG B EFGBVMU SBUJOH SFGMFDUT
DPOTJTUFOU XJUI UIF SFTU PG JUT VOJWFSTF PG SBUJOHT BOE NBZ EJC
GJOBODJBM PCMJHBUJPOT PS MPDBM DPNNFSDJBM QSBDOJDF
%FTDSJQUJPO PG 'JUDI 3BUJOHT 4USVDUVSFE 'JOBODF -POH 5FSN 0CM
3BUJOHT PG TUSVDUVSFE GJOBODF PCMJHBUJPOT PO UIF MPOH UF
EFGBVMU 5IFTF SBUJOHT BSF UZQJDBMMZ BTTJHOFE UP BO JOEJWJEVB
"")JHIFTU \$SFEJU 2VBMJUZ
i""w SBUJOHT EFOPUF UIF MPXFTU FYQFDUBUJPO PG EFGBVMU SJTL
DBQBDJUZ GPS QBZNFU PG GJOBODJBM DPNNJUNFOUT 5IJT DBQBDJUZ
" 7FSZ)JHI \$SFEJU 2VBMJUZ
i"w SBUJOHT EFOPUF FYQFDUBUJPO PG WFSZ MPX EFGBVMU SJTL
DPNNJUNFOUT 5IJT DBQBDJUZ JT OPU TJHOJGJDBOUMZ WVMOF SBCMF U
")JHI \$SFEJU 2VBMJUZ
i#w SBUJOHT EFOPUF FYQFDUBUJPO PG MPX EFGBVMU SJTL 5IF D
TUSPOH 5IJT DBQBDJUZ NBZ OFWFSUIFMFTT CF NPSF WVMOF SBCMF UP
IJHIFS SBUJOHT
(PPE \$SFEJU 2VBMJUZ
i###w SBUJOHT JOEJDBUF UIBU FYQFDUBUJPO PG EFGBVMU SJTL E
DPNNJUNFOUT JT DPOTJEFSFE BEFRVBUF CVU BEWFSTF CVTJOFTT PS F
4QFDVMBUJWF
i##w SBUJOHT JOEJDBUF BO FMFWBUFE WVMOF SBCJMJUZ UP EFGBV
PS FDPOPND DPOEJUJPO PWFS UJNF
)JHIMZ 4QFDVMBUJWF
i#w SBUJOHT JOEJDBUF UIBU NBUFSJBM EFGBVMU SJTL JT QSFTFOU
BSF DVSSFOUMZ CFJOH NFU IPXFWFS DBQBDJUZ GPS DPOUJOVFE QBZN
FOWJSPONFOU
\$\$\$ 4VCTUBOUJBM \$SFEJU 3JTL
7FSZ MPX NBSHJO GPS TBGFUZ %FGBVMU JT B SFBM QPTTJCJMJUZ
\$\$ 7FSZ)JHI -FWFMT PG \$SFEJU 3JTL
%FGBVMU PG TPNF LJOE BQQFBST QSPCBCMF
\$ &YDFQUJPOBMMZ)JHI -FWFMT PG \$SFEJU 3JTL
%FGBVMU BQQFBST JNNJOFOU PS JOFWJUBCMF
% %FGBVMU
*OEJDBUFT B EFGBVMU %FGBVMU HFOFSBMMZ JT EFGJOFE BT POF
• 'BJMVSF UP NBLF QBZNFU PG QSJODJQBM BOE PS JOUFSFTU VOEFS U
• CBOLSVQUDZ GJMJOHT BENJOJTUSBUJPO SDFDJWFSTIJQ MJRVJEBUJF
JTTVFS PCMJHPS PS
• EJTUSFTTTFE FYDIBOHF PG BO PCMJHBUJPO XIFSF DSFEJUPST XFSF PG
DPNQBSFE XJUI UIF FYJTUJOH PCMJHBUJPO UP BWPJE B QSPCBCMF QB
%FTDSJQUJPO PG 'JUDI 3BUJOHT \$PVOUSZ \$FJMJOHT 3BUJOHT

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4USVDUVSFE 'JOBODF %FGBVMUT

*NNJOFU EFGBVMU DBUFHPSJ[FE VOEFS i\$w UZQJDBMMZ SFGFST
CZ UIF JTTVFS BOE JT BMM CVU JOFWJUBCMF 5IJT NBZ GPS FYBNQMF
UZQJDBM IBT B HSBDF QFSJPE EVSJOH XIJDI JU NBZ DVSF UIF QBZNFU
GPSNBMMZ BOOPVODFE B EJTUSFTTFF EFCU FYDIBOHF CVU UIF EBUF P
GVUVSF

"EEJUJPOBMMZ JO TUSVDUVSFE GJOBODF USBOTBDUJPO XIFSF B
TVDI UIBU JU JT OPU FYQFDUFE UP QBZ JOUFSFTU BOE PS QSJODJQBM J
EVSJOH UIF MJGF PG UIF USBOTBDUJPO CVU XIFSF OP QBZNFU EFGBV
UIF PCMJHBUJPO XJMM UZQJDBMMZ CF SBUFE JO UIF i\$w DBUFHPSZ

4USVDUVSFE 'JOBODF 8SJUF EPXOT

8IFSF BO JOTUSVNFOU IBT FYQFSJFODFE BO JOWPMVOUBSZ BOE J
J F PUIFS UIBO UISPVI BNPSUJ[BUJPO BOE SFTVMUJOH JO B MPTT UP
JOTUSVNFOU 8IFSF UIF BHFODZ CFMJFWFT UIF XSJUF EPXO NBZ QSPWF
GVUVSF JG BOE XIFO QFSGPSNBODF JNQSPWFT UIF B DSFEJU SBUJOH
CF SFWFSTFE UIF DSFEJU SBUJOH XJMM CF SBJTTE UP BO BQQSPQSJBU
BT JSSFWFSTJCMF UIF DSFEJU SBUJOH XJMM CF MPXFSFE UP i%w

Notes:

In the case of structured finance, while the ratings do not address the loss severity given default of the rated liability, loss severity assumptions on the underlying assets are nonetheless typically included as part of the analysis. Loss severity assumptions are used to derive pool cash flows available to service the rated liability.

5IF TVGGJY iTGw EFOPUFT BO JTTVF UIBU JT B TUSVDUVSFE GJOBODF

&OIBODFE &RVJQNFOU 5SVTU \$FSUJGJDBUFT &&5\$T BSF DPSQPSB
UP GJOBODF BJSDBGU FRVJQNFOU %VF UP UIF IZCSJE DIBSBDUFSJTUJ
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" TIPSU UFSN JTTVFS PS PCMJHBUJPO SBUJOH JT CBTFE JO BMM DE
BOE SFMBUFT UP UIF DBQBDJUZ UP NFFU GJOBODJBM PCMJHBUJPO JT
4IPSU UFSN EFQPTJU SBUJOHT NBZ CF BEKVTUFE GPS MPTT TFWFSJUJ
NBUVSJUJ JT WJFXFE BT iTIPSU UFSNw CBTFE PO NBSLFU DPOWFOUJPO
NBUVSJUJ 5ZQJDBMMZ UIJT NFBOT VQ UP NPOUIT GPS DPSQPSBUF
PCMJHBUJPO JT 6 4 QVCMJD GJOBODF NBSLFUT

')JHIFTU 4IPSU 5FSN \$SFEJU 2VBMJUJ *OEJDBUFT UIF TUSPOHFT
DPNNJUNFOUT NBZ IBWF BO BEEFE i w UP EFOPUF BOZ FYDFQUJPOBMMZ

' (PPE 4IPSU 5FSN \$SFEJU 2VBMJUJ (PPE JOUSJOTJD DBQBDJUZ C

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4QFDVMBUJWF 4IPSU 5FSN \$SFEJU 2VBMJUJ .JOJNBM DBQBDJUZ
IFJHIUFOFE WVMOFBSCJMJUZ UP OFBS UFSN BEWFSTF DIBOHFT JO GJOB

\$)JHI 4IPSU 5FSN %FGBVMU 3JTL %FGBVMU JT B SFBM QPTTJCMJ

3% 3FTUSJDUFE %FGBVMU *OEJDBUFT BO FOUJUJ UIBU IBT EFGBV
DPOUJOVFT UP NFFU PUIFS GJOBODJBM PCMJHBUJPO 5ZQJDBMMZ BQQ

% %FGBVMU *OEJDBUFT B CSPBE CBTFE EFGBVMU FWFOU GPS BO

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