

US

Principles

Principles of Business
Principles of Business

Principles of Business
Principles of Business
B/ (Hatfield)

Principles of Business
Principles of Business
B/ (Sussex) Hon, / (Brighton)

Principles of Business
Principles of Business
/ (London)

Principles of Business
Principles of Business
B/ / (Sussex)

Principles of Business
Principles of Business
DS, (London), D (London)
FR, L, F, edS

Principles of Business
Principles of Business
BS, (Strathclyde), S (Lasgo) Lhd
(Strathclyde), LL, RLhams

Principles of Business
Principles of Business
BS, LhD (V delaide)
F/ S, F/ D, om / ust

Principles of Business
Principles of Business
/ (Lasgo), B/ (ity)

Principles of Business
Principles of Business
/ (London) / /

830<3C90%2=/ 83-8-36%+7 / 8<
+; 8 , * (* F6; 8@8 J 4F 62F87 B A8J 8A02AG BA
CE? J; 8A G8 , A48E<G BC8A87 4 A8J 789A87
6B
[[[2G TD [8G529d [<00>95HJ 0.5518078664J 0.6/)J 0.518529d [<007. Td [0H1361 Td [[([2G TD [84I361 Td [[([2G TD [87529d [<00/)J 0.51I30)0 TJ 0.2

%27 7 +<C90>2/ ' 83@ <3C= =>->?< 90
- 9< 9<+> 19@<8+8- /

+; 8 , A*8E<G F 4A A78C8A78AG6BFCB4G 5B7LJ; BF8 B: 4?
F4GF 78B8F9B@4) BL4? ; 4E8E!GF B5-86G CBJ 8E 4A7
92@8J B> B9: B1 8E4A68 4B F8CBHGA G8 ; 4E8E4A7
FHCCBBA * QG8F +; 8 ; 4E8E4A7 * QG8F J8B B1 8J 87
7H5A: 4A7 4@8A787 J < 89B6GB@ %4E;
9B7J A: (B:L BHA6?4CCB14?

+; 8 ; 4E8E4A7 * QG8F 8FQ5?; GEB8 F8C4B3 5B78F 846;
J < 6B4E 789A87 9HA6BAF 4A7 BFCBAF5-?GF G @4A4: 8
4A7 B1 8E88 G8 , A*8E<G F 46G<GF

9?8- 3F G8 : B1 8EA: 5B7L B9G8 , A*8E<G BFCBAF5?B
9EF8GA: G8 : 8A8E?FQ2G: 6 74B6GBA B9G8 AFGBGA
9BE8AF5A: CBC8E466BHAQ5?G 4A7 9BE@4A4: A: <F
9A4A68F CBC8E4A7 A1 8F@8AG 4A7 G8 : 8A8E?5HF48FF
B9G8 , A*8E<G BHA6?6B@CB8F A78C8A78AG CB8FFBA4?
F8E<8F 46478@6 4A7 FG78AG@8@58E 4CCBA87 BE8?86G7
HA78EG8 * QG8F B9G8 , A*8E<G +; 8 @4-BE< 4B
A78C8A78AGABA FQ9 ABA FG78AG@8@58E +; 8 B8FB B9
; 4E4A7 -<8 ; 4EB9G8 BHA6?4B F8C4B3 9B@ G8 B8
B9G8 , A*8E<G F ; 89 K86H38 G8 -<8 ; 4A68?BE BHA6?
; 4F4 @8@58E; <CB9 +; 8F8 4B G8 -<8 ; 4A68?BE 8CHG
-<8 ; 4A68?BE HC G 9B88A A78C8A78AG@8@58E 4CCBA87
5L BHA6? GEB8 @8@58E B9G8 * 8A4G G B B8E@8@58E
B9G8 46478@6 FQ9 BA8 @8@58EB9CB8FFBA4?F8E<8F
FQ9 G8 (BF78AGB9G8 * G78AG , ABA 4A7 G8 FG78AG
B8BF8A4G8 B9G8) 8F84E; (BFG87H4G * 6; BB? !C@88G
4G84FG8HEG8F 4 L84E4A7 ; 4F9*8 6B@@<88F 4A7 G B-BAG
6B@@<88F +; 8 @4CB8F FC864?L BFB8E87 G BHA6?9BE
786FBA 4B F8CBHGA 4 FGF86864?L 4CCB1 87 5L BHA6?
5L <F BJA 786FBA 4A7 HA78EG8 A4A6-4?%8@BBA7H@
J < G8 <; 8E 7H54GBA HA7A BHA6?9BE A: 7A7
BHA6?; B7F G <88G8 BFCBAF5-?GF 9BE8 BA: BA:
FQ2G: 6 74B6GBA B9G8 , A*8E<G G8 @BA<BEA: B9
AFGBGA4?89B6G8A8FF 4A7 4CCB1 4?B9@4BE781 87BC@8AG
!CB6848FB: H7EB8E9B@ G8 F8A8E8K86H38F BA G8 74L
G 74L BC8BBAF B9G8 , A*8E<G 4A7 <F F5F74E 6B@C4A8F
+; 8 ; 4E-<8 ; 4E (8E8E@4A68 4A7 -<8 ; 4E A4A68
4B 4CCBA87 9B@ 4@BA: FCG8 A78C8A78AG@8@58E +; 8
, A*8E<G F 9H2L4F480) 5H90889A8E1050(7 00) 6B4B899 00(4B3C8F50027G: 8B0H(1F) 3597 0.723F-8B0H(1E) 823F1204(0299)(9)(18) 3

' 830<3C90%2=/B 3+8-3-6%+77/8>=

400BA@8AG 2pÖ `b pQ4PÓh`W2pÖ `b pQ4PÓhe x Ö `b h'€ Đ× E `6 Ý`6 Ø

' 83@<3C90%2=/B 3+8-3-6%&+77/8>=

8478E; C@AA: 4A7 BG8E4E887 46G<3FFH6; 4FBHE
94: F; C* HFF8K(?FQB: @@@8 J; 6; 4?BJF4?FG78AG?A\C

' 83@=>3C90?@= / B 3+8-36%>7 / 8<

\$/ =: 98=3 333 = 90>2/ ' 83@<3C= 9?8- 3

' (+ ' 0"! -! ' "/ +,"-24 ! + +(' (+)(+-"(' (. ' "%,
+ ,)(' ," % (+-! &"" ",-+ -"(' ' ' & ' & ' -(-! "+, (-!
' "/ +,"-2 ' ", + *. "+ -() +, ' - . "- "" ' " %- - & ' -, (+ !
"" ' " %2 +

BHA6?F BFCBAF5B 9BE8AFEA: G8 CBC8E@4A8A4A68
B9466BHAGA: B6BE7F 4A7 G8 CBC4E4BA B99A4A64?
F4C@8ACF G4G 48 4 CHB 4A7 9A4E18J B9G8 F4C B9
49A4F B9G8 , A48FE4A 466BE74A68 J <G G8 , A48FE4F
; 4E8E4A7 * 4CHBF G8 * 4C@8ACB9) 86B@@8A787
(E4G68 66BHAGA: 9BE HE8E4A7 <; 8E 7H64CBA
!AF4C4BAF 74C7 "HA8 BG8EB8I 4AG466BHAGA:
4A7 9A4A64?BCEBA: F4A74E7F 4A7 J <A G8 CE@F 4A7
6BA7CBAF B94 A4A64?%8@BEA7H@4: B87 58G 88A
4A7 BHA6?B9G8 , A48FE4

BHA6? GEBH; <F8A8EB968EF 4A7 G8 A4A68 4A7
!AI8F@8ACF 4A7 H7<G B@@<8F FBDH87 B8AFHB
G4GA G8 CBC4E4CBA B9466BHAGA: F4C@8ACF

R FH45B 466BHAGA: CB768F 4B F8B6C7 4A7 4CC87
6BAFFCAG

R H7: 8@8ACF 4A7 8FG@4CF 4B @478 G4G4B B4FBA45B
4A7 CH78AG

R 4CC7645B 466BHAGA: 4A7 9A4A64?BCEBA: F4A74E7F
; 4I8 588A 9B7J 87 FH586GCB 4AL @4CE4?78C4EHBFBF
7F6BF87 4A7 8KC4A87 A G8 9A4A64?F4C@8ACF 4A7

R 9A4A64?F4C@8ACF 4B CBC4E7 BA G8 : BA: 6BA68EA
54FF HA7FF <GF A4CCEBCE4C B CEBFH@8 G4GG8
, A48FE4 J <?6BAGAHB A BC8E4CBA

BHA6?; 4F 4>8A B4FBA45B F8CF GEBH; <F8A8E
B968EF 4A7 H7<G B@@<8B B

R 8AFHB G4G9A7F 9EB@ 4B HF87 BA2 9E
G8 CHEBF8F 9EJ; <; G8L; 4I8 588A: 48A 4A7 A
466BE74A68 J <G G8 A4A64?%8@BEA7H@J <G G8
HA7A: BHA6?4A7 4AL BG8E6BA7CBAF J; <;
@4L 9EB@ C@8 B C@8 CBF6E58

R 8AFHB G4G9A7F 9EB@ G8 +846; A: 8A6L 4B HF87
BA2 9E8G8 CHEBF8F 9EJ; <; G8L; 4I8 588A: 48A
4A7 A466BE74A68 J <G G8 HA7A: : B8@8AGJ <G G8
: 8A6L 4A7 4AL BG8E6BA7CBAF J; <; G8 : 8A6L @4L
9EB@ C@8 B C@8 CBF6E58

R 8AFHB G4GG8B 4B 4CCEBCE4C 9A4A64?4A7
@4A4: 8@8AG6BACBF A C468 B F49B: H4E7 CH576
9A7F 4A7 9A7F 9EB@ BG8EFBH68F

R F49B: H4E7 G8 4FF8CF B9G8 , A48FE4 4A7 B CBI8AG
4A7 78C6C94H7 4A7 BG8E4EB: H7E8F 4A7

R F86HB G8 86BAB@64? 8968AG4A7 8986C8
@4A4: 8@8AGB9G8 , A48FE4 F BFBH68F 4A7
8KC8A7CEB

BHA6?F F4CF987 G4GG8 , A48FE4; 4F 478DH4C
BFBH68F B 6BAGAHB A BC8E4CBA 9E8G8 9BFB8845B
9HCEB 9E8G F B4FBA G8 : BA: 6BA68EA 54FF 6BAGAHBF B
58 47BC87 A G8 CBC4E4CBA B9G8 9A4A64?F4C@8ACF

+: FBCBEGF @478 FB82 B G8 BHA6? A466BE74A68 J G
 G8 ; 4E8EF 4A7 * QGK8F B9G8 , A48EF G ' HE4H7 GJ BE
 ; 4F588A HA78E4>8A FB G4GJ 8 @<; CFQ8 B G8 , A48EF G
 BHA6?G BF8 @4G8EF J 8 4B BDH8B7 B FQ8 B G A4A
 4H7 GEF BCBEG4A7 BEAB BG8ECH8CBF8 +B G8 9H78FC8K8AG
 C8E@G8 5L 7J J 8 7B ABG4668CGBE4FFH@8 BFCBAF5 G
 B 4ALBA8 BG8EG4A G8 , A48EF G BHA6?9EBHE4H7 GJ BE
 BEG F BCBEG BE9EG8 BCA8AF J 8 ; 4I 8 BE@87

\$/ =: / - >@ < =: 98=3 333 = 90>2/

' 83@ <3C 9?8- 3+8. +?. 39<

F8KC7487 @BB 9H7 A G8 * QG@8ACB9) 8FCBAF5 G8F
 B9G8 , A48EF G BHA6?F8GBHGBA C4: 8 G8 BHA6?F
 BFCBAF58 BEG8 CBC4E4BA B99A4A64?FQ8@8ACF J ; G;
 : 48 4 GB 4A7 94EI 8J ' HEBFCBAF5 G F B 4H7 G 4A7
 8KCBFF 4A BCA8A BA G8 9A4A64?FQ8@8ACF A466BE74A68
 J G 4CC6458 7J 4A7 !AG8A4GBA4?* Q4A74EF BA H7 GA
 , # 4A7 !B7A7 +; BF8 FQ4A74EF BDH8B HF B 6B@C2 J G
 G8 H7 GA (B6G8F B4E F G 64?* Q4A74EF 9E H7 GE

' 830<3C90%2=/ B 3+8-3-6%8+7 / 8>=

&B8

D

N

8-97 /

HA7A: BH46? EAG

6478@6 88F4A7 *HCOBEG EAG

) 8F84E; EAG 4A7 BAE6G

' G8E' C8GA: !A6B@8

A7BJ @8AGIA6B@8 4A7 !A8BFG) 868+458

+BQ?!A6B@8 EHC 4A7 F; 4B B9-BAGI 8AGBF

\$8FF *; 4B B9-BAGI 8AGBF A6B@8

<9?: 3-97 /

B / 8. 3?4

* 496BFG

8CB64GBA

' G8EBC8GA: 8K8AF8F

!A8BFGC4L458

+BQ?8K8A7-GB EHC 4A7 F; 4B B9-BAGI 8AGBF

\$8FF *; 4B B9-BAGI 8AGBF 8K8A7-GB

<9?: / B / 8. 3?4

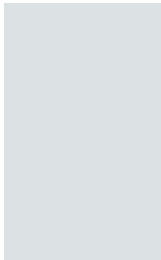
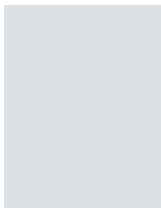
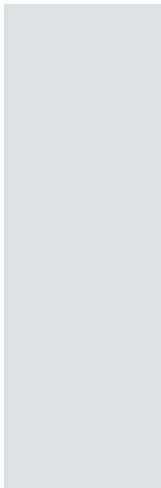
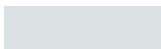
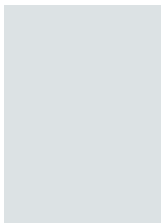
BHC FBTBAG7BQDEB4E9B89804068406B0029887B(93470B02TB((S)H)E(4)H)B88004.0-B-K26004.0-B/(K2

3/ . += / >
+4A: 5B 4FF8G
!A 8FQ@8AG

&B8

D

N



' 83@ <3C90%2= / B 3+8-3-6%8+7 7 / 8>=

' 83@<3C +6+8- / %2/ / >
4F4G "H2

' 83@<3C +6+8- / %2/ / >
4F4G "H2

&B8

D

N

3/ . +==/ >

+4A: 5B 4FF8G

!A! 8FC@8AG

8. 9A7 / 8> 3@=>7 / 8>

?<4 8>+==/ >

* 86>F

858E

!A! 8FC@8AG

4F, 4G54A> 4A7 A; 4A7

< . 39< 4@BHAG 94?A: 7HB J < A BA8 L84E

! / >- ?<4 8> 6+, 333 =

89>+6+==/ > 6 == - ?<4 8> 6+, 333 =

< . 39< 4@BHAG 94?A: 7HB 498E@88B G 4A BA8 L84E

&' & ! & %% 8%/ B- 8. 31 : / 8=38 6+, 33C

#/ 8=38 6+, 33C

&' & ! & %% 8%B- 8. 31 : / 8=38 6+, 33C

\$/ : <4 =/ 8> . , C

/ 0' <4 . -+: 3>+61<+8>

8. 9A7 / 8>

(8E@4A8AG

KC8A745B

\$/ =/ <@=

!A6B@8 4A7 8KC8A7<HB 466BHAG8K6?H7A: C8AF-BA ?45?G

(8AF-BA BF8E8

!A6B@8 4A7 8KC8A7<HB 466BHAGA6?H7A: C8AF-BA ?45?G

) 8I 4?H4BA BF8E8

&' & ' ! %

+; 8 A4A64?* 4G@8AG J8B 4CCBI 87 5L G8 BHAG?BA &BI 8@58E 4A7 F<A87 BA <G 58; 495L

#<90' =9< +<2B1 % +8=2+A/ \$ % / 8- / <

(3/ 2+8- / 89< 2+3<90 9?8- 3 3/ ->9<90 3+8- /

830 < 3C 90 % 2 = / B 3 + 8 - 3 - 6 % 4 + 7 / 8 >

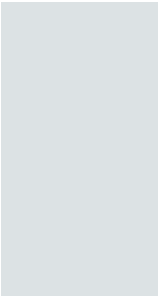
N

D

80% $\Rightarrow$ B $38+8-36\%$ $\Rightarrow$ 7 / 8 $\Rightarrow$

N

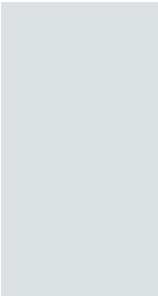
D



80% $\Rightarrow$ B $38+8-36\%$ $\Rightarrow$ 7 / 8 $\Rightarrow$

N

D



) Tf 7.14820]TJ /F0 /8]TJ 8.94730 Td [(E)+8]T
 D N
 <
 90914(90)90100[4+6]U 0.8(95)67401Q2H03P06

) Tf 7.14820]TJ /F0 /8]TJ 8.94730 Td [(E)+8]T
 D N
 <
 90914(90)90100[4+6]U 0.8(95)67401Q2H03P06

) Tf 7.14820]TJ /F0 /8]TJ 8.94730 Td [(E)+8]T
 D N
 <
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) Tf 7.14820]TJ /F0 /8]TJ 8.94730 Td [(E)+8]T
 D N
 <
 90914(90)90100[4+6]U 0.8(95)67401Q2H03P06

+ = 3 90: < : + < > 98
+; 8F8 9A4A64?FQ@B@8ACF; 418 588A C8C4B7? A
466B74A68 J < G 8 * @B@8ACB9) 86B@@@8A787 (B6G68
*') (66BHAGA: A H68E4A7 <; 8E 7H64GBA
!AFGGBAF 4A7 A 466B74A68 J < 4CC?6458
66BHAGA: * 4A74EF +; 8L 6BABE@ B: H74A68 C-H7F; 87
5L G8 <; 8E 7H64GBA H7A? BHA6?

+; 8 9A4A647F24B@8AG 4B CB4B7 HA78EG8; FGE64?
6BFC6BAI8AG3A @B7-987 9EG8 I47H4BA B9 A7BJ @8AG
FF8GAI8FG@8AG 4A7 487 FF8GAI8FG@8AG

[illegible]

+; 8 , A48E<E F BB: F0B7 9BE4A7 F5-36G0 - + BA
<F 5HFA8FF 46G<3F +; 8 , A48E<E F 6; 4E457 ABA
5HFA8FF 46G<3F 94?BH<78 G8 F6BC8 B9- + 8 F8

' 83@<3C90%2= / B 3+8-8-8-6%+7 / 8>=

8@=>7 / 8>=

\$F87 AI 8FC@8AGF ; 87 4F 9*87 4FF8CF BE8A7BJ @8AG
4FF8CF 4BB F; BJA 4G@4E8GI 477B !AI 8FC@8AGF A F-5F7 4E
HA78E4>A: F 4BB F; BJA 4GG8 7BJ 8EB96BFGBEA8GB47F453
I47B

' 830 < 3C90%2= / B 3+8-3-6%&+7 / 8>=



! " & B / 8. 3?< -98>B?/ .

" >2/ <9: / <+>B1 / B / 8= / =

) 8F78A68F 64BFA 4A7 BG8EBC8EBAF

BAFH@45B 4A7 745B4CBE 8KC8A7<GB

BB>F 4A7 C8EB7<4F

8?BJ F, <C]TJ@.2527200447650 [K1Q>@F5]U.59129262Q<DE{(4)6]T0.58126980>6]T(406]91205369<0E((7)909205220

D

N

' 83@<3C90%2= / B 1.8+8-3.6%>7 / 8>=

F! 9> = > >2/ B+8-3.6%>7 / 8>=

8+@<3= 90
/ B / 8. 3?<
, C+->3C

* (49
6BFG

8CB64CBA

' G8E
BC8E4GA
8KC8AF8F

!ACBFG
C4L45B

@>+6

+BQ?

N

N

N

N

D

N

* 6; BB?

6478@<6 F8E<8F

) 8F84E; : EAG
6BAC46G

) 8F78A68F 64BFA:
4A7 BG8EBC8EBAF

(B@<8F

7@<AFBA

' G8E8KC8AF8F

@>+6: / <B- 97 / +8.
/ B / 8. 3?< +--9?8>

+BQ?

+; 8 78CB64CBA 6; 4E 8 ; 4F 588A 9A787 5L

89EB7 64CQ?: EAG B784F87

8A8E?<6B@8

D

N

+; 8 6; 4E 8 9E78CB64CBA <6778F 4@BHAQ B9N @ 9A787 5L: 8A8E?<6B@8 4A7 N @ 9A787 5L 789EB7
64CQ?: EAG <A BFC86GB9G8 , A<8E<L F F, 4B B99*87 4FF8G8DHQ@8AG<A G8 E; CBA 4A7 * HFF8K%87<4?* 6; BB?

' 83@ < 3C 90% 2 = / B 3+8-3-6% + 7 / 8 =

F i 9 / = 9 > 2 / 3+8-3-6% + 7 / 8 =

! " & 813 6 + == / >

98=96 > / .

9=>+8. @ 2 + > 38

G H HFG

77 < 3AF 4G6BFG

+ 4AF 3EB96BAFGH6 37 4FF8F

G "H2

/ : < 4 - 3 > 38

G H HFG

; 4E8 9BEL84E

G "H2

! / > , 995 @ 2 / + >
? 6

& 8G5BB > I 47B 4G
"H2

' 83@ < 3C

9=>+8. @ 2 + > 38

G H HFG

77 < 3AF 4G6BFG

+ 4AF 3EB96BAFGH6 37 4FF8F

G "H2

/ : < 4 - 3 > 38

G H HFG

; 4E8 9BEL84E

G "H2

! / > , 995 @ 2 / + >
? 6

& 8G5BB > I 47B 4G
"H2

FF8F A
6BHE8 B9

89 > 6
D

BB8; B7
N

\$84F8; B7
N

6BAFGH6 3A
N

DHC@8AG
N

FF8F A
6BHE8 B9

89 > 6
D

BB8; B7
N

\$84F8; B7
N

6BAFGH6 3A
N

DHC@8AG
N

BB8; B7 7A7 I 47B7 4CN @ F A67H787 A 487 FF8F 4A7 F ABGF 5-86GB 78CB64 3A

I A67H787 A G8 6 2 A8G5BB > I 47B B9 34F8; B7 7A7 4A7 5H7 A: F 9EG8 , A 8EF 6 4A7 G8 BHC F N @ N @
A BFC86GB94FF8F; 87 HA78E9A4A68 34F8F 8CB64 3A 9EG8 L84EBA G8F8 4FF8F J 4F N @ N @

!" & 3/ . +==/ >3@=>7 / 8>=

98=963 +> .

' 83@<3C

\$F87 F86H83F
, A?F87 F86H83F 467H78F 4I 8F@8AG
4 F5F74B3F 4A7 4<

D	N

D	N

' 83@<3C90%2= / B 3+8-36%>+7 / 8>=

F! 97 = >9 >2/ 3+8-36%>+7 / 8>=

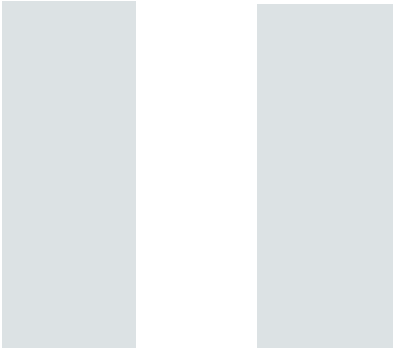
' 83@<3C90%2= / B 3+8-3-6%+7 7 / 8>=

F i 97 = 79 >2/ 3+8-3-6%+7 7 / 8>=

! " & / , >9<

98=963 +7/ . ' 83@<3C

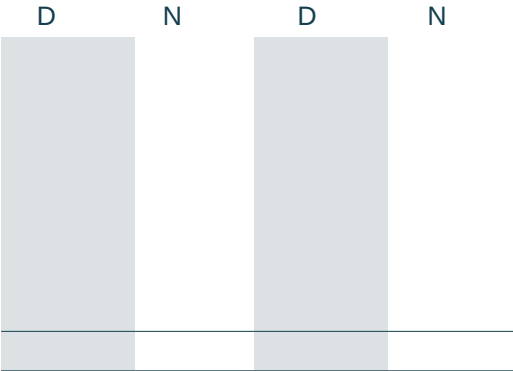
7 9?8> 0+631 . ?/ A323 98/ 7 +<3 ě 8 ů 8 u ß Ð ñ q 0 Ð – Æ T d



! " & 4 . 39< +7 9?8> 0+631 . ?/ A323 98/ 7 +<

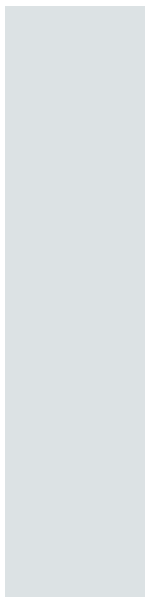
98=963 +7/ . ' 83@<3C

4A> B i 8E7E9G
%BEG4: 8F 4A7 BĜ8E7B4AF
' 574CB AF HA78E9A4A68 7B4F8F
) 8F84E6; 6B7<BE
K68CCBA4?FQ496BFG 466EH87
B7<BE 4A7 466EH4F
@BHACF BJ 87 B F-5F74E HA78E4>A: F



@BHA@ BC4L45? A BFC86GB954A> B4AF BHC4A7A: 4G "H2 @4L58 4A41F87 4F B?BJ F

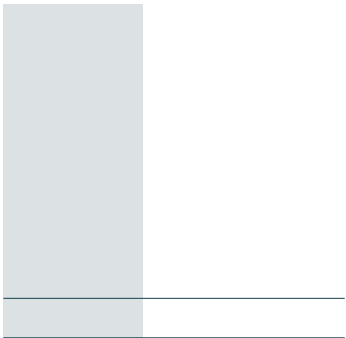
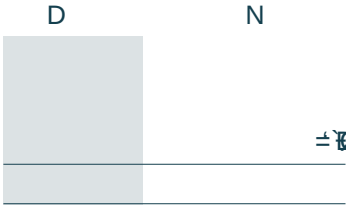
5



! " & ! 9> = >9 - 98=963 +>/. - +=2 03A =>+> 7 / 8> - 98>3?/ .

\$/ >?<8= 98 3@=>7 / 8> +8. =/ <@ 31 9003+8-/

!A6B@8 9B@ 8A7BJ @8A6F
!A6B@8 9B@ F, BEG8F@ 4I 8FG@8A6F
!A8BFGC47



± 0 CV @ 4 R x

' 830 <=3C90%2= / B '8+8-3+6%>+> 7 / 8> F! 9> = >9 >2/ 3+8-3+6%>+> 7 / 8>=

! " & #/ 8=3

' 83@<3C90%2= / B 3+8-3-6%>+7 / 8>=

F! 97 = >9 >2/ 3+8-3-6%>+7 / 8>=

! " & # / 8=38 =- 2/ 7 / = - 98>3?/ .

! " & # / 8=38 =- 2/ 7 / = - 98>3?/ .

CG8 I474GBA 74G G8 @4E8G 47B B9G8 4FF8F B9G8 F6; 8@8 J4FN @4A7 G8 I47B B9G8
F6; 8@8 F G6; A64?CBI FBAF J4FN @ B4I A 4 F; BE9?B9N @ +; 8 4FF8F G8B9B J8B
F H68AGB 6B8E B9G8 58A89F J; G; ; 47 466E87 G @8@58E 498E47BJ A 9BE8K36G7 9H6B
A6B4F8F A84EA F

+; 8 46G4E 47B I47B7 G8 F6; 8@8 BA 4 AH@58EB9B G8E54F8F 4F4G G8 I474GBA 74G ' A G8 F6; 8@8 F
; FGB6: F54FF HFA 4 I474GBA 4G B9AGBFGA BFC86B9C4FG8E G8 74573F B9 C8E4AAH@ G8
8K36G7 BGEA BA: F G8 9A7A: B18?J 4F4CBBK@4G2 , A78EG8 (8AFBA (B86GBA HA7
B: H4GBAF AGB7H687 5L G8 (8AFBAF 6G GJ4F 9A787 BA 4 5HLBH54FF <8 4FFH@A: G8
* 6; 8@8; 47 7F6BAGAH87 BA G8 I474GBA 74G G8 4FF8F J BH7; 418 588A4CBBK@4G2 B9G8 4@BHAG
A868FF4E G F86HB 4?G8 , ** 58A89F J G 4A AFHBA68 6B@C4AL 4A7 HFA:) * 9BE@H4 4F G, ** J4F 4
FA: B 8@CBL8EF6; 8@8 HFA: 4 5BA7 7F6BHAG4G B9 C8E4AAH@ 54F87 BA FCBCL87F G8 46G4E
8FG@4G7 G4G G8 9A7A: B18?4G FG%4E; J4F

F C4EB9G F I474GBA G8 GF88F; 418 78GE@A87 498E6BAFH4GBA J G G8 8@CBL8E 4 B6B8E C7A G
C4L B9G8 F; BE9?5L %4E; +; 8 A8KGBE@4?G8AA4?46G4E?I474GBA F 4F4G %4E; !9
8K36BA68 HC G G4G74G F A 7A8 J G G8 4FFH@CBAF @478 9EG F 6HBBAG46G4E?I474GBA 4A7
6BAG5HGBAF 4B C47 4G G8 78GE@A87 4G F BE4@BHAG G8 F; BE9?4G %4E; F8FG@4G7 G 58
N 57BA 8DH48AGB 4 9A7A: B18?B9 +; 8 6BAG5HGBA 4G J 758 BI 8J 87 4F C4EB9846; I474GBA
4A7 @4L 58 BI F87 @BB 9BDHBAQ

+; 8 G6; A64?CBI FBAF B7G 8FF8AG4? G G8 C4FG8E G8 74573F 4A7 9A7A: B18F 5HGGF 47B A868FF4E
G 4FF8FF G8 BA: BA: 6BFCB9A8J 2 466EHA: 58A89F +; 8 6BFCB99H6B 466E4?J 4F 64BH4G7 HFA: G8 F4@8
4FFH@CBAF 4F G BF8 HF87 G 64BH4G G8 G6; A64?CBI FBAF 8K68CGG4G G8 I474GBA 4G B9AGBFG
4FFH@87 4FF8GBHGBE@4A68 BI 8E: F B9 C8E4AAH@ 6B@C4B7 G C8E4AAH@ 9EG8 G6; A64?
CBI FBAF : A: 4 7F6BHAG4G B9 C8E4AAH@ 47B G8 47BJ 4A68 9BECB@BGBA4?F47E A6B4F8F J 4F
ABG4F; <; A42FF; 4F F; BJ A I8E I4E45B B18F B9: BJ G BI 8E4A7 45BI 8: 8A8E?C4L A6B4F8F A B68AG
L84E 4A7 G8 F47E: BJ G 4FFH@CBA 5HGBAG G8 6BFCB99H6B 466E4?F 54F87 BA @BB F45B; FGB6
F47E 8K36BA68 BJ 8I8E J; 8A 64BH4G: G8 C4FG8E G8 74573F B9G8 F6; 8@8 4 64HGBA4E BFB8E8; 4F
588A A67H87 A477GBA BA 466BHAGB9G8 I4E457E @8AGBA87 45BI 8

F4G G8 I474GBA 74G G8 F6; 8@8 J4F F3?4 9H2 A4?* 47E * 6; 8@8 9BE9H6B 466E47F 4A7 G8 CBI 47A:
8@CBL8E6BAG5HGBA 4G J4F B9F47E8F

B7BJ A , # : BI 8EA@8AGB: F74GBA 9B@ F4GGBE C8AFBA A6B4F8F BEBI 474GBAF 4B 54F87 BA G8
BAFH@8E(B68F!A78K@84FH B9C68 A94GBA FGB64? G8F8 A6B4F8F; 47 588A 54F87 BA G8) 8G?
(B68F!A78K@84FH B9C68 A94GBA

* A68 G8 CBI BHFI474GBA 4F4G %4E; G8B; 418 588A 4 AH@58EB96; 4A: 8F G G8 58A89F
CBI 787 5L G8 F6; 8@8 47GBH; G8F8 5864@8 89B6G8 9B@' 6B58E +; 8F8 A67H8

! / A 8x+8x

' G8EG4A AFC8696 ?@G7 64GH@F4A68F A8J 8AGBAG 4B ABJ CBI 787 BA 4 4B8E) 8I47B7 8A89F
) 54FF B G8EG4A 4 A4?* 47E * 54FF

! 9< +6: / 8=38 +1/

+; 8 &BE@4?C8AFBA 4: 8 J4F A6B4F87 9BE9H6B F8E G8 4A7 A8J 8AGBAG G 4: 8

6 B3 6 \$/ >3/ 7 / 8>

BK5B BGB@8AGBCBAF J8B AGB7H687

/ 7 , / <- 98>3 ?>38= 3- < +/= .

BAG5HGBAF J8B HC987 G C8E4AAH@4A7 C8E4AAH@ 9BE * * 86GBA @8@58E 4A7) * 86GBA
@8@58E BFC86G82

! " & #/ 8=38 =- 2/ 7 / = -98>3?/ .

9=>=2+<31

!9G8 B4?6BAG5H3A 8I8?8K6887F B9* 4?B3FC8E4AAH@ G8 8@CBL8EF J ?C4L B9G8 8K68FF BI 8E
4A7 @8@58EF J BH7 C4L G8 B@4AA B G8 9A7 4F 477<3A4?6BAG5H3AF

#/ 8=38 3- < + = - +:

BEF8E<8 78E<87 498E * 8C8@58E , ** J ?@4G; A6B4F8F A B964?C8AFBAF 9BEG8 9EFG !9
B964?C8AFBAF A6B4F8 5L @BB G4A G8A, ** J ?C4L; 4?B9G8 798BA68 HC B 4 @4K@H@ A6B4F8 B9

* A68 %4E; : B54?A 8FC@8AG@4E8CF; 4I8 6BAGAH87 B 9H6G4G 4A7 9B7J A: <C C8> A* 8C8@58E
A9A3A; 4F 786?A87 E4C7L B 4EF G8 L84E8A7 4G BH; G8 @4E8CF 4FF8FF@8AGB9A9A3A; 4F
B@4A87 B4FBA45L 6BAF3AG+; 8 46G4E; 4F 8FG@4G7 G4GG8 9A7A: 8I8?4F 4G %4E; 9A7A:
HA78EG8 F6; 8@8 FC8696 9A7A: B: <@8; 47 9A7A 9B@ B ' I8EG8 C4FG @BAGF G8 9A7A:
8I8?; 4F @CBI 87 9B@ 4F 4G %4E; B +; F 8FG@4G F 54F87 BA G8 BFI7F 9B@ G8
I474G3A 4GG8 FG%4E; 4?BJ A: C5@4R2 9E A 8FC@8AGBGEAF 4A7 6; 4A: 8F B @4E8G6BA7<BAF
+; 8F8 4B F<; G7 4F G8 G B @BFG<A964AG36GE 4986GA: G8 9A7A: CBFBAF J; 6; ; 4I8 588A G>8A AG
466BHAG9BEG8 %4E; 8FG@4G3A

' A G8) * 54FF HFA: 4 5BA7 7F6BHAG4G B9 C8E4AAH@ 54F87 BA FCBGL87F G8 46G4E
8FG@4G7 G4GG8 9A7A: 8I8?4G %4E; J4F A 8FG@4G B99A7A: 8I9 C

' 83@<3C90%?=/ B 3+8-36%>+7/8>=

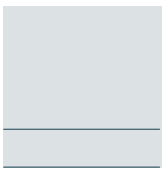
F! 9> = >9 >2/ 3+8-36%>+7/8>=

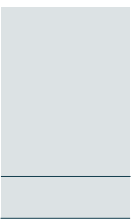
B+8-36% $\rightarrow$ 7 / 8=

$$F(1.9) = 9.21 \quad 3+8-36\% \rightarrow 7/8 =$$

>	?	G	"H2
D	N		

' 830 < 3C 90 % 2 = / B 3 + 8 - 3 - 6 % + 7 / 8 > =





' 83@<3C90?=/B 3+8-36%+77/8>=

F!97=>9>2/ 3+8-36%+77/8>=

! " & #/ 8=38 =- 2/ 7 / = - 98>3?/ .

) / 312> . +@<+1/ 60 / B: / ->+8- C09<7 9<+3C> , 6 = ?= / . >9 . / > < 3/ , / 8/ 03>9, 61+>38=

+6 / 7 +6 %48 8@48

%8@58E4: 8 6HBBAG79B 8K086Q4A6L
%8@58E4: 8 79B 8K086Q4A6L 4G4: 8

3@ 0' +<23>9<C

D N N N N

/ 8/ 03>9, 61+>38

+3<@6/ 90=- 2/ 7 / +==/ >

/ 03>

B: / <3 8- / +3= +8. 9==/ =
98 % 2/ 7 / ==/ >

@BHAG N

(8E68A4: 8 B9* 6; 8@8 FF8CF

+3= +8. 9==/ = 98 % 2/ 7 / 3, 333 =

H8 6 8K08E8A68 N

(8E68A4: 8 B9G8 (BBF8AG 47HB

B9* 6; 8@8 \$45-738F

H8 6; 4A: 8 B954FF

(8E68A4: 8 B9G8 (BBF8AG 47HB

B9* 6; 8@8 \$45-738F

89>+6+7 978>4 - 9183/ . 3 >2/ =>+7 / 8>
90>9>+64 - 9183/ . 1+3= +8. 0==/ =

@BHAG N

(8E68A4: 8 B9G8 (BBF8AG 47HB B9G8

* 6; 8@8 \$45-738F

% %%

* HFF8K BBHC* 4>8; B78E* 6; 8@8 * ** 4 789A87 6BAC5H3BA F6; 8@8 9BEA8J 1 8@CBL87 66; A64?
678E64?4A7 BG8EFHCOBEGF49 +; 8 F6; 8@8 47BJF @8@58EF 6 6BAC5H3 4 @A@H@ B9@BAG 1 F474E
4A7 B98EF 79B 4FFH4A68 4A7 46B@8 CB086CBA 4 477CBA 6 C8AFBA 58A89CF +; 8 , A48EF 6 6BAC5H3F G B
Q@8F G8 @8@58E6BAC5H3BA HC 6 4 @4K@H@ B9@BAG 1 F474E

82/ : / 8=38 - 9=> 09<>2/ ' 83@ <3C+8. 3= =?, =3 3+3 = A/ 4

D N

BAC5H3BAF 6 , **

BAC5H3BAF 6 , * (*

BAC5H3BAF 6 * **

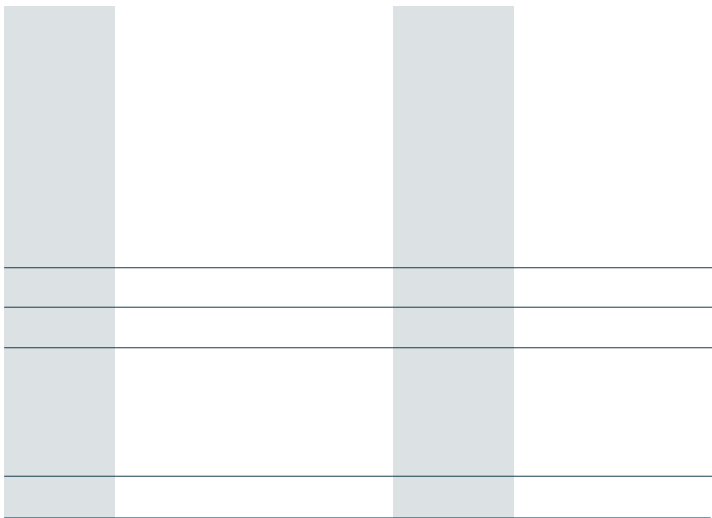
' G8E BAC5H3BAF

' 830<3C90%2=/ B 3+8-3-6%+7 / 8>=

F

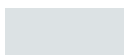
' 8 30 < 3 C 9 0 % 2 = / B 3 + 8 - 3 - 6 % 2 + 7 7 / 8 > =

F i 9 7 = > 9 > 2 / 3 + 8 - 3 - 6 % 2 + 7 7 / 8 > =



! " &

+ : 3 + 6 - 9 7 7 3 7 / 8 >



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