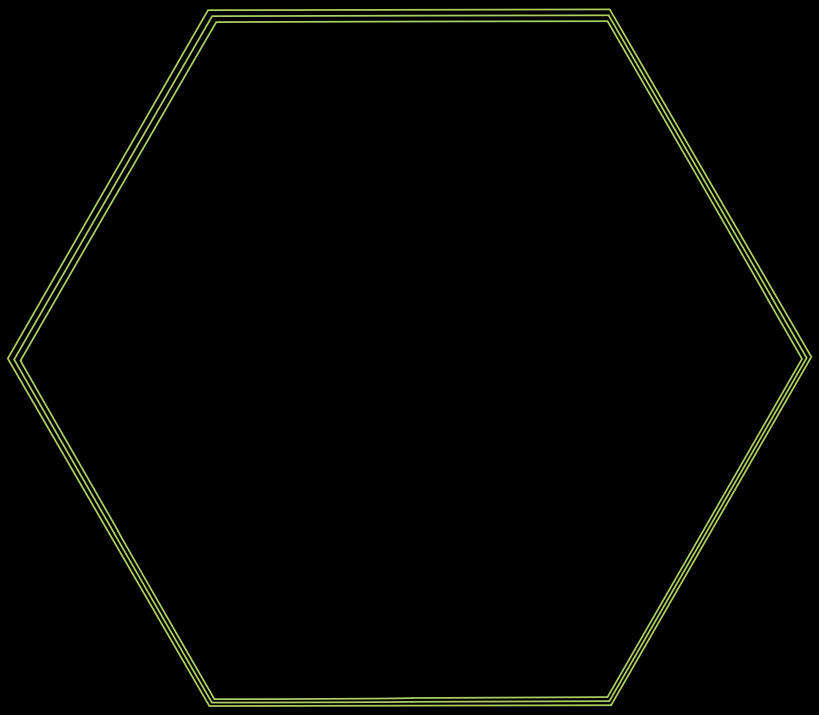


naE6

PART 1 .Ì'i'\ž 8Ð=Ö

^a\N•ß&ŒJ®R©=Ö© v•'•

PART 2 ^a\N•ß&ŒJ®R©=Ö©

?`&ŒG”,ƒ

04/08 ^a\N=Ö© ?‰Zó&Œk0?`&Œ6ÇR¥G”,ƒ/ú- S@

Zó&Œk0“ W·&x}US,æ~

Zó&Œk0?`&Œhg}a–ææ~

Zó&Œk0?`&ŒG”,ƒ/ú- S@æ~

s T%R¢?`&ŒZó&Œk0G”,ƒ}a–æ/ú- S@æ~

09/10 ?‰^a\N=Ö© Zó&Œk0?`&Œ™‹.7- S@

Zó&Œk0“ W·/ú?`&Œhgæ~

Zó&Œk0?`&Œ™‹.7- S@æ~

11/14 ^a\N=Ö© ?`&Œ™ ¡€š šv&x/ÿ®é

Zó&Œk0?`&Œ_ØH CÞK TK—HSÅæ~

Zó&Œk0[•ßR•R…K TK—HSÅæ~

Zó&Œk0R•R…Cƒ‹•OP, æ~

Zó&Œk0R•R…?`&Œ5‘/ æ~

Zó&Œk0R•R…?`&Œ/@(Yx«6 æ~

Zó&Œk0R•R…B¨(r•d&Œæ~

Zó&Œk0[•ß^ˆž¤—HSÅæ~

Zó&Œk0?`&Œ/ •CÞ—HSÅæ~

PART 3 ?`&Œfµ„€B¨(r

¬Ý?{— –ææ{O_v;)B©{æ{}i}o>$2¤?`&ŒB¨(r(d-VDŠ— æ~

T%'ñ0V(ræ{- x«C Jœæ{&vP L¿/.?`&ŒKw? Rj. •J. æ~

, « —HSÅæ{s0=Ö- S@æ{tr- ?`&Œ? O…€«O…=Ö/ÿ®é(rk=æ~

,"\¤™ ¡€æ{E .Ê•Åšvæ{S,DŠZó&Œk0?`&Œ™ ¡€— 'ßKwSû(dy¹æ~

.Ì'ï'\ž 8Ð=Ö

^a\N•ß&ŒJ®R©=(

v•'•

&¹™ Exˆ E>Jö³s0O…,#5Bö´Iökœæ{. F/± v O…€«OV« 1$0 ?•
m¸•ss•æ{sdS'Lrz 0 ?•± v •ß&ŒJ®R©O…€«ævv•sf± •ßæxm¸
8´s+ž Eˆæ{) •slî5B± v O…€«R?9i5'•ÓC¾}Q]8DŠ— 1$r"(
0 ?•ª='³æ{6Æ,.« 0b6Ç?{æ{« 0bk0'a nRj. 1$v×i uæ&g}A
@ (Ym¸>Jk=6 nJ®•J6 &•¨v'ƒJ^æ{}•"RC¾?‰± &¥Z
m¸/.=Ö/". æ{}QO…€«ŸÈ1$.Ì'iBÑO…:<J ,¥æ{^a
CƒD":$« 0b± &¥Zó&Œk0K8OP&g>AO¨
© =Ö&ô o

^a\N•ß&ŒJ®R©=Ö© Pý.Ì'i'\ž 8Ð=Ö- -F&x.Ì'i, , '\ž L}€…æw©Ë5 æxRc¨ó, 0@+óT% n'\ž •XœÕŸÈv×i C•ŸÈ=Ö© 0V. m¸± v •ß&ŒO…€«=Ö© o

± •ß=Ök05ˆT%=Ö&ôR•¨,æ{kK.Ì'i'\ž 8Ð=Ö™ ™ >N>A&•&Œ6Æ,.–æ-" nO…=Ö8Ð}4 /ú&•&Œ—Cs•— ~(æ{™ ™ >N>A>J–ò–æ-" n>J–ò8Ð}4'Ä/ú>Jš(O…=Öm¸> LWæ{™ ™ ? ± •ßO…=Ö•Bs•1$O…€«™ ¡€m¸U,SÅ n— (.1$Kw? æ{? O…=Ö, •Bs••s•d™ ¡€n/ L}æ{ŸÈ- &•&Œ6Çp„—C n&•&Œ—C/ú>Jš(h „œm¸Kw? O…B×kKFªT%•å]#Rc}Q°‰m¸O… B×K 'ã oO…=Ö–æ-"1$—Cs•— ~(•ÓC¾? Rû?`&Œm¸'³[æ{E —Hi –ÿO…=Ö&x>Jš(C‡ ¡~æ{Zó&Œk0,(RcnlLy&s@ B¨(rm¸•J. oK}.#. 1$r"( )B©{ŸÈ¨vRc,"•ß&ŒJ®•J •LTMSû,¥æ{? =Ök0>JP6•ß&ŒJ®•J•LTM¢¹>Aæ{(ª=Ök0Zó&ŒPž•J0ZPž‡&E¤nqC¾m¸ =Ö&Œ— &ü1$•ß&Œ™4TT— &ü o

^a\N•ß&ŒJ®R©=Ö© æwv•sf^a\N=Ö© ææ{líu('5 Cƒæ{5'8….Ì'iBÑ]s]ä/ &¥ ,"Rà± s0J®5)/ æ{(Y'5]s]ä/ ^a\N.Ì'i, , '\ž L}€…æw©Ë5 æxRc¨ó, 0@+óT% © ,;æ{z &°'iPÅ± ž , š æ{5'i (Y~((™Šæ{'\ž) -D oT%5)« sd 'dæ{DŠ v0« sd C‚P0x› oT%/ Rc— P6>$2¤m¸O…=ÖV• n=Ök0>‹ƒ“V• n5C&ü¨“““>T n –æv¾R¼>T n—2¬ O…>T n=Ök0-ì/•v æ{T%5)h 7¯O®\ÇC•©È o

. =Ö/'CƒRûæ{P‹5ˆ6Æ,.« 0bk0'a nRj. 1$v×i uæ&g}Am¸>Jk=6 nJ®•J6 &•¨v 'ƒJ^æ{ENIí'+fµ„€tr- n&•&Œ´.PÈm¸O…=Ö(dy¹1$v×i W·D- oi –ÿO…=ÖkK.Ì'i '\ž 8Ð=Ö•å]#O…B×K 'ãæ{>Jš(O…=Ö5ˆ.Ì'i'\ž 8Ð=Öm¸“ -"Kw? &tæ{kK.Ì'i, '\©Ë5 /ú,&> ? 0!&•&ŒR¼S,J¬K o&•&Œ— ~(z J~r"(ª=[æ{h¡Rc6yBÑ'\ž •X œÕ n–æv¾R¼C¾k=J®R© n[üœ¨U,]5&x}v)]J®R© n'\ž •Xˆ v×i nR¼kO&g(d.Êæw[ü œ¨P00bæx'@&¡&•&Œ o5ˆT%k0,(Rc.Ì'i'\ž 8Ð=ÖYûD-=ÖxBæ{=Ök0Zó&ŒkK.Ì'i'\ ž 8Ð=Ö¬è0 8Ð&•Zó&Œ— &üæ{0ZPž03‡&E¤5B>{Rc,"ŸÈ¨v¬è0 m¸nqC¾•ß&Œ™4TT— &ü o=Ö© 0 K¦T%'ñ•ë0V. =Öm¸(.7æ{:$}J'Äz ™ 6Æ,.&¹TMEñæ{\¤¡~=Ök0-/P H — 1$>Jš(•J. m¸L¿/. o•[CƒRû=Ö© &vP . E ? =Ök0•ß&Œ“ -"1$?`&Œm¸Kw? æ{ (ÜJo.Ì'i, '\©Ë5 ? 'ƒ. ™4_Bm¸0 ?•ª=[ 1$0¨}5'ƒJ^m¸&gy¹-)m¸( GÃO_v;æ{ +Ó0_L€†[…oC•( s Zó&Œk0-L'ñ&ŒB¨(r o5ˆ=Ö© /ŽCƒm¸sdS'. . &tæ{•v}o8´Cƒ )BKonáœÅ± m¸Zó&Œk0?`&Œhg o

^a\N•ß&Œ
J®R©=Ö©
?`&ŒG",*f*

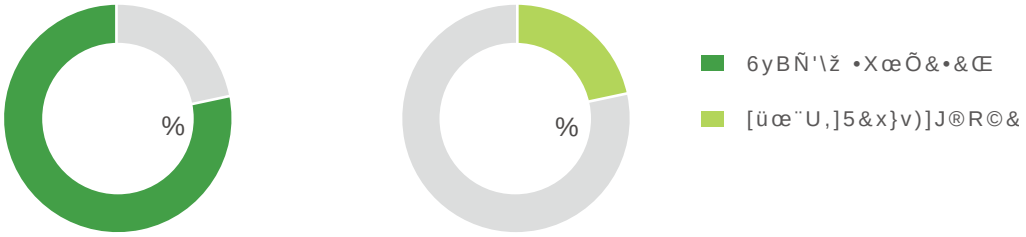
BEIJING
JIAOTONG
UNIVERSITY

^a\N=Ö©
?‰Zó&Œk0
?`&Œ6ÇR¥G”,ƒ/ú- S@

R¥ŸÈ- ? '¢Zó&Œk0“ W· n}US, n?`&Œhg n?`&Œ](0b'Ä/ú•d&Œ- BÒv P0« ? ?‰Zó&Œk0?`&Œ6ÇR¥G”,ƒ•s•d}a –æ1$- S@ oR¥Jã0Ç&¥]•/ú ?‰Zó&Œk0?`&ŒO¨L }a–æJ YúPž¨,&¹ Cƒ Rb Pˆ o

Zó&Œk0“ W·&x}US,

^a\N=Ö© ?‰± •ßZó&Œk0, Rc 0\æ{,&&¥6yBÑ'\ž •XœÕ&•&Œ 0\æ{/Q ö<[üœ¨U,]5&x}v)]J®R© &•&Œ 0\æ{/Q o



5C Zó&Œk0&•&Œ- BÒ

Zó&Œk0&¥kQk0 0\æ{/Q ö<9Nk0 0\æ{/Q o

5C Zó&Œk0kQ9NZñ(¾

Zó&Œk0k0_BRûƒH, 5B &¡n•BÑ/ æ{,&&¥.Ì'i 'ƒæ{r·DŠ 'ƒæ{\N.Ì 'ƒæ{\N/B 'ƒæ{0WSL 'ƒæ{[Ð…< 'ƒæ{[Ð'¯ 'ƒæ{•(> 'ƒæ{,;‰ 0" 'ƒæ{?Ë'¯ 'ƒæ{';/B 'ƒ o0Pn•k0_B'ƒO¨9u&t5Cö;

5C Zó&Œk0k0_B- BÒ

Zó&Œk0?`&Œhg}a–æ

^a\N=Ö© ?‰Zó&Œk0?`&Œhg&¹ o

•• ?‰Zó&Œk0?`&ŒG",ƒ}a–æ

'ƒO¨	^?ž#hg	vŠ}(hg	?`&Œhg
	4P@'hg		

- &•&Œ?`&Œhg}a–æö;

•• ?‰6yBÑ'\ž •XœÕ&•&ŒZó&Œk0?`&ŒG",ƒ}a–æ

'ƒO¨	^?ž#hg	vŠ}(hg	?`&Œhg

•• ?‰[üœ¨U,]5&x}v)]&•&ŒZó&Œk0?`&ŒG",ƒ}a–æ

'ƒO¨	^?ž#hg	vŠ}(hg	?`&Œhg

8Š\¤ö;
^?ž#hg æw5B,;^?ž# - 5Bæw7¯æx^?ž#æx Zó&Œk0Fª'ƒO¨ö<
vŠ}(hg ^?ž#hg vŠ?`&Œ/8–óhg vŠ.#. 0V0Zhgö<
?`&Œhg vŠ}(hg b³] ?`&Œhg o&t0Z o

Zó&Œk0?`&ŒG”,ƒ/ú- S@

^a\N=Ö© na-xBº?`&ŒZó&Œk0 'ƒæ{,&&¥/., R¥s0 'ƒæ{vŠ?`&Œ/8–ó/ú.#. 0V0Z 'ƒæ{b³] ?`&Œæwk='ƒ/@(Y — PÈ nƒH&º-/&Œæx 'ƒ oTOL ?`&ŒG”,ƒæ{- -F? Zó&Œk0?`&Œ5‘/](0bæ{vŠ}(/@(YF•™ n^?ž#G”,ƒv •s•d}a–æ o

\¤ö;kK'5± •ßZó&Œk0vŠ?`&Œ/8–ó n.#. 0V0Z'ƒO¨œÅ?1æ{?`&Œ}a–æ0Žk='ƒ/@(Y— PÈv b³] ?`&ŒEND-æ{&t0Z o

Zó&Œk0?`&Œ5‘/](0b

•• ^a\N=Ö© ?`&ŒZó&Œk0?`&Œ5‘/](0b

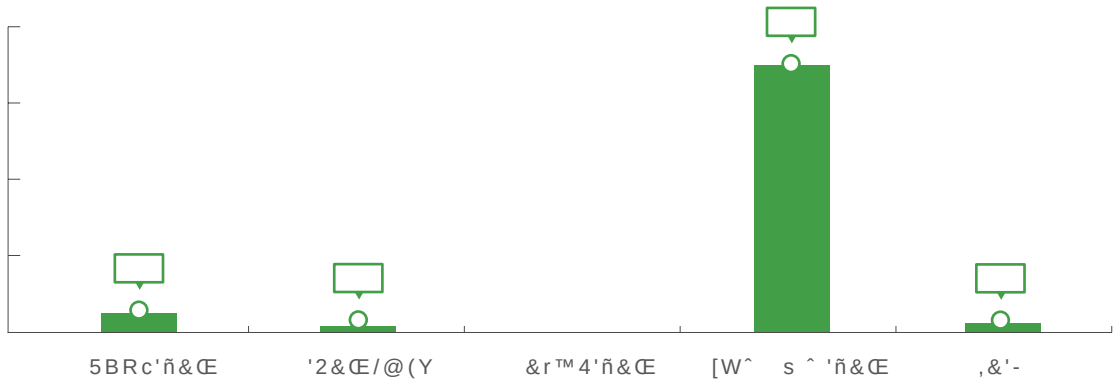
?`&Œ5‘/	.Ì'iBÑ	,&'-	Fª–æ
'ƒO¨			
Zñ(¾æw æx			

5C ^a\N=Ö© ?`&ŒZó&Œk0?`&Œ5‘/](0b

vŠ}(Zó&Œk0?`&Œ/@(YF•™

•• ^a\N=Ö© ?`&ŒZó&Œk0?`&Œ5‘/](0b

5BRc'ñ&Œ	'2&Œ/@(Y	&r™4'ñ&Œ	[Wˆ s ˆ 'ñ&Œ	,&'-	Fª–æ
'ƒO¨					
Zñ(¾æw æx					

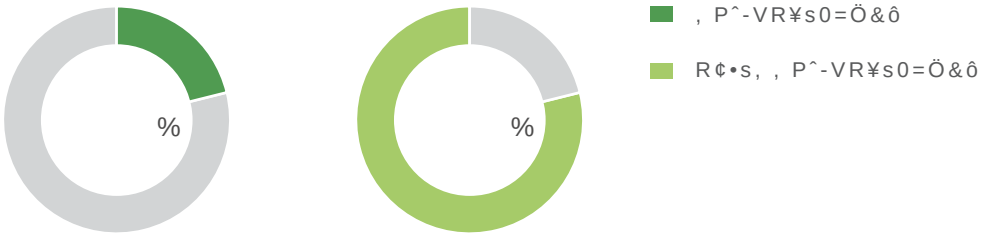


5C ^a\N=Ö© ?`&ŒZó&Œk0/@(YF•™

5ˆZó&Œk0?`&Œ/@(Y&¥æ{[Wˆ s ˆ 'ñ&Œ/QRc m¸Zñ(¾æ{-L[Wˆ s ˆ 'ñ&Œ?`&ŒIí&¹^a\N=Ö© Zó&Œk0m¸¡~ '³•åKJ o

Zó&Œk05B,;^?ž#G”,ƒ

^a\N=Ö© ?‰± •ßZó&Œk0&¥æ{, Rc 0\0Z=Ö/., , Pˆ-VR¥s0© T% .Ì'i)LG s0J®8Ð=Ö }i}o=Ö&ôæ{/QZó&Œ 'ƒO¨ oTOL BÑO…:<æw'iO…± < > 0?æxOÒ'Ýy5r_æ{± •ß=Ö© 03'ÄL€†[± •ßC¾?‰(s Zó&Œk0•s, R¥s0 =Ö&ô o•o'H=Ök0u×0VBÑO…:<“ >Am¸Rõ'Ýæ{ž •B=ÖT%}~0V]5— LW0\æ{'Ä/ú.Ì'iBÑ1$.Ì'i'\ž 8Ð=Ö}F}Im¸ö³&•LyR¥ö´ •L— æ{‘ E60 , .Ì'i)LG s0J®8Ð=ÖnqC¾&•&Œ=Ö&ô o

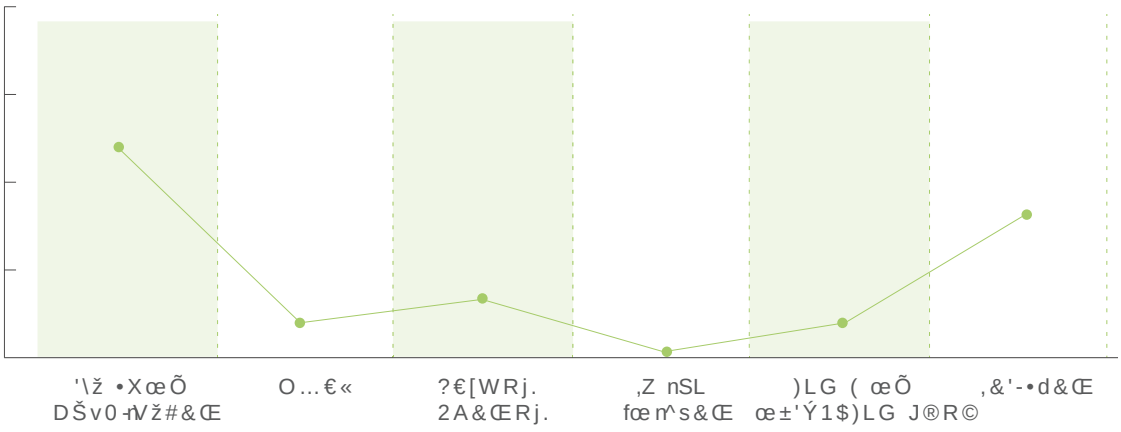


5C ^a\N=Ö© Zó&Œk05B,;^?ž#G”,ƒ

Zó&Œk0?`&Œ•d&Œ- BÒ

•• ^a\N=Ö© Zó&Œk0?`&Œ•d&ŒG”,ƒ

•d&Œ	'\ž •XœÕ n DŠv0 n-Vž# &Œ	O…€«	?€[WRj. n 2A&ŒRj. n)]i v ,&'- Rj. &Œ	,Z nSL rfœ n ^s&Œ	)LG (œÕ n œ±'Ý1$)LG J®R©Rj. &Œ	,&'-	Fª–æ
'ƒO¨							
Zñ(¾							



5C ^a\N=Ö© Zó&Œk0?`&Œ•d&Œ- BÒ

^a\N=Ö© Zó&Œk0?`&Œm¸•d&Œ- BÒ&¥æ{J>/QZñ(¾RR8´m¸•d&ŒPý'\ž •XœÕ nDŠv0 n-Vž#&Œv ,&'-Rj. &Œæ{-L—*•d&Œ ?`&Œm¸Zñ(¾/QFª'ƒO¨&¹ æ{•o/ÿPå'+=Ö© m¸=Ös0fµ„€1$. =Ö(.7æ{'Ä/úYüx«•d&Œ0¨OP?`&Œm¸C›CÞ o

&v0Z~ˆ(dZó&Œk0?`&ŒG”,ƒ

•• ^a\N=Ö© &v0Z~ˆ(dZó&Œk0?`&ŒG”,ƒ- S@

x«6	FªO¨	5B¸;^?ž#		?`&Œæw0Ž^?ž#æx	
		'ƒO¨	Zñ(¾	'ƒO¨	Zñ(¾
, (d					
kQk0					
9Nk0					

'¢'Ä&s?`&ŒO¨L n•- æ{^a\N=Ö© 9Nk0m¸^?ž#hg± '5kQk0æ{?`&Œhg&ò•t± '5kQk0æ{5ˆE2-x?`&Œh 7¯&tæ{9Nk0[•ß H Hf&x[•ß. . s•CÞQ\ž‘± '5kQk0 o

s T%R¢?`&ŒZó&Œk0G”,ƒ}a–æ/ú- S@

J ƒ[Cƒ Rb Pˆæ{^a\N=Ö© ?‰Zó&Œk0&¥, Rc 0\=Ök0R¢ˆE>J?`&Œ/á0b ¢5ˆ¡JªB¨(rR¢ˆE>J 'ƒæ{ 5 n•JªB¨(rR¢ˆE>J 'ƒ o^a\N=Ö© ± CÞ¡~“ s T%R¢?`&ŒZó&Œk0G”,ƒæ{? Zó&Œk0m¸,((dG”,ƒ•s•dMëSÅš švæ{¡Ï? Rc?`&ŒH HfR¢?`&Œm¸Zó&Œk0•s&gYÿL¿(Ø?`&ŒRj. B¨(r o

•• ^a\N=Ö© s T%R¢?`&ŒZó&Œk0G”,ƒ}a–æ

?‰
^a\N=Ö© Zó&Œk0
?`&Œ™‹.7- S@

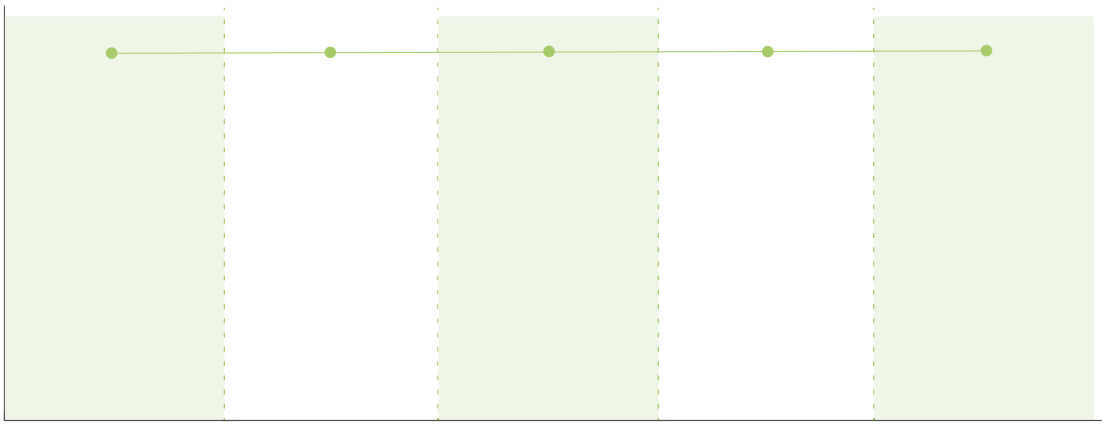
&¹'+, « pGtU- S@^a\N=Ö© Zó&Œk0?`&Œ™‹.7æ{'Ä&t? ?‰Zó&Œk0?`&ŒO¨L •s•d}a–æ- S@æ{'Ä) •JR?9i m¸J¾Lã?`&ŒB¨(r“ E’ nBÑ5ž0 .Ê“ E''Ä/ú=Ök0KJ&Œ“ —HO®&x?`&Œ¬ëR• o

Zó&Œk0“ W·/ú?`&Œhg

'¢Zó&Œk0'ƒO¨n•æ{•['@Cƒ^a\N=Ö© ± •ßk0Zó&Œ'ƒO¨œÅ&¹sØ>A o'¢?`&ŒhgRûn•æ{=Ö© Zó&Œk0?`&Œhgnq? œÅ± æ{?`&Œhg&gnl)BKo5ˆ 'Ä&s o

•• ?‰Zó&Œk0“ W·/ú?`&Œhg

Cƒ'ç	'ƒO¨	?`&Œhgæw æx



5C ?‰?`&Œhg}a–æ

•• ?‰^a\N=Ö© Zó&Œk0?`&Œ&x^?ž#G”,ƒ

Cƒ'ç	Fª'ƒO¨	^?ž#hg

?‰± •ßZó&Œk0?`&Œ5‘/ - BÒ

'¢?`&Œ5‘/ Rûn•æ{•['@Cƒ=Ö© ± •ßZó&Œk05ˆi?`&Œhg5²•*-L 'Ä&sæ{•o&x=Ö© K8k0&¥ B©08&¹.Ì'ik0 _BRc," o&gƒÚ.Ì'ik0_BZó&Œk08Ð8´k†'i?`&ŒœÅ8´æ{[•ßnq? >,PÒ o

^a\N=Ö©	.Ì'iBÑ

ž •B? •['@Cƒ^a\N=Ö© Zó&Œk0?`&ŒG”,ƒ- S@æ{03'Än•- =Ö© m¸&•&Œ— ~(_Ø™Èr"( ª=[ æ{Zó&Œk06Æ,.™ ¡€E¤-Lk= 'ƒ/@(Y1$r"( m¸–é03æ{)BKo'+œÅ± m¸?`&Œhg oZó&Œk0m¸?`&Œ•åKJPˆ™‹i F•æ{?`&Œ5‘/ ©Ë&¥5ˆ.Ì'i o

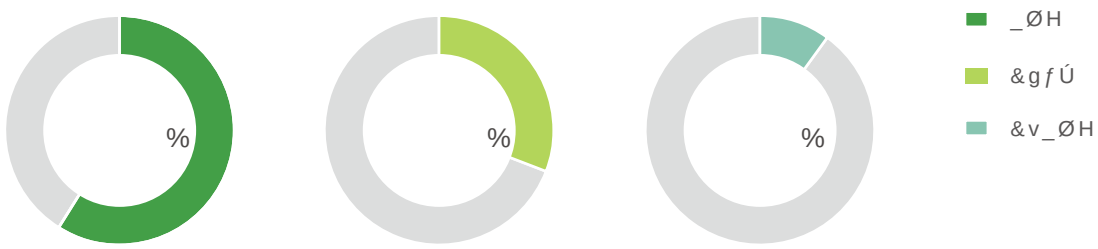
- S@•[Cƒ=Ö© Zó&Œk0?`&Œ™‹.7æ{'Ä/ú± v O…€«O…=ÖOV« m¸&vP ^?.Êæ{=Ö© 'ƒJ^6Æ,.m¸™ ¡€( &vP L¿/.æ{=Ök0m¸ }~0Vz ™ &x>Jš(•J. ( 8Ð8ÐL¿± æ{J>6Æ,.m¸Zó&Œk0( R?9i5‘_Ø™Èr"( ª=[ o03¬ë-<=Ö© Zó&Œk0?`&Œhg' ( )BKo 5ˆœÅ± [•C,æ{Zó&Œk0m¸?`&Œ&ò(R?™‹>J¨â1$i F••åKJ o

^a\N=Ö© ?`&Œ
™ ¡€š šv&x/ÿ®é

&¹'+LMLãR¥?‰Zó&Œk0m¸?`&Œh¡g æ{'+“R‚&[ •ßR•R…æ{_ØH CÞ'Ä/úOP, [•C‚æ{=Ö© « 0b ?‰Zó&Œk0•s•d'+?` &Œg ‚ƒ¨|/w—HSÅæ{—HSÅK TKm¸Zó&Œk0FªO¨&¹ 0\ o

Zó&Œk0?`&Œ_ØH CÞK TK—HSÅ

5ˆ?`&Œ_ØH CÞ—HSÅP0« æ{ m¸Zó&Œk0••r ö³_ØH ö´æ{ –é&¹ö³&gƒÚö´æ{ --••r ö³&v_ØH ö´ o

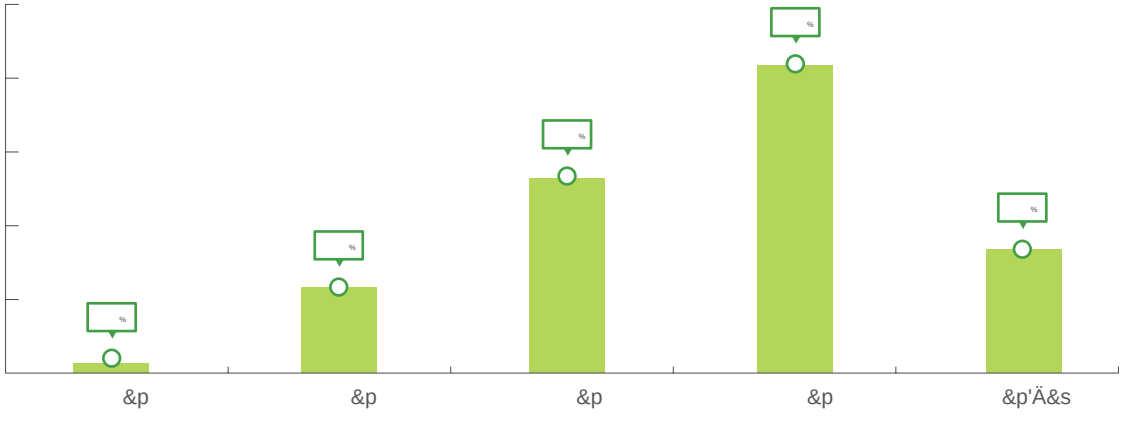


5C Zó&Œk0?`&Œ_ØH CÞ—HSÅ

Zó&Œk0[•ßR•R…K TK—HSÅ

Zó&Œk0R•R…Cƒ‹•OP,

?`^a\N=Ö© Zó&Œk0m¸R•R…Cƒ‹••\“Šæ{ m¸Zó&Œk0R•R…Cƒ‹•&¹ &p+Ëæ{ R•R…Cƒ‹•…´555ˆ &p +Ë&Ó¨‚æ{ R•R…Cƒ‹•™„•B &p+Ëæ{Yü8ªæ{R•R…Cƒ‹•5ˆ &p1$ &pm¸Zó&Œk00P/Q 1$ o



5C Zó&Œk0R•R…Cƒ‹•—HSÅ

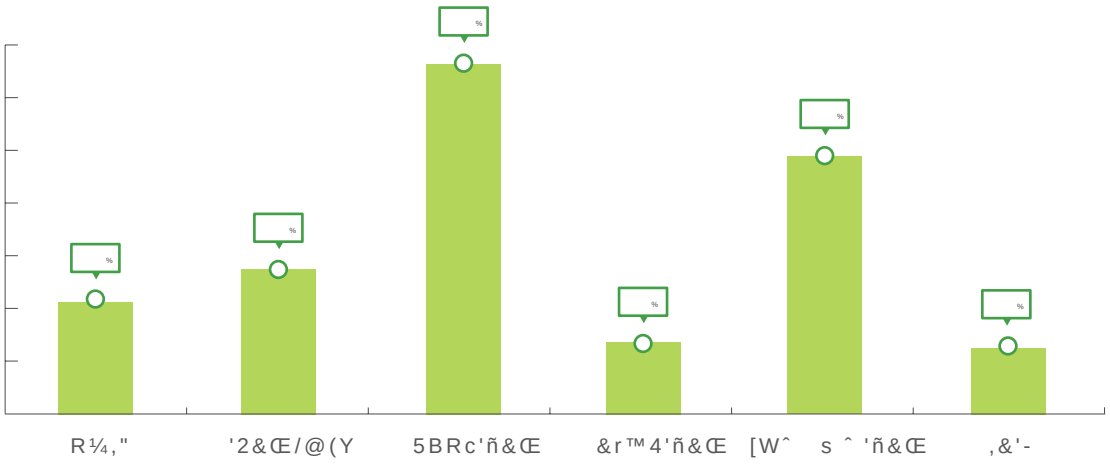
Zó&Œk0R•R…?`&Œ5‘/

TOL , 5B6yBÑ•dO_5‘(Ym¸-"- æ{± •ßZó&Œk0R•R…?`&Œ6yBÑK}d‘LW0\(ÜYƒ&¹.Ì'iBÑæ{/Q ö<-°n•})6yBÑæ{/Q ö<RR0_Pý5‘})6yBÑ/ú'Ä&tæ{/Q o

5C Zó&Œk0[•ßR•R…—HSÅ

Zó&Œk0R•R…?`&Œ/@(Yx«6

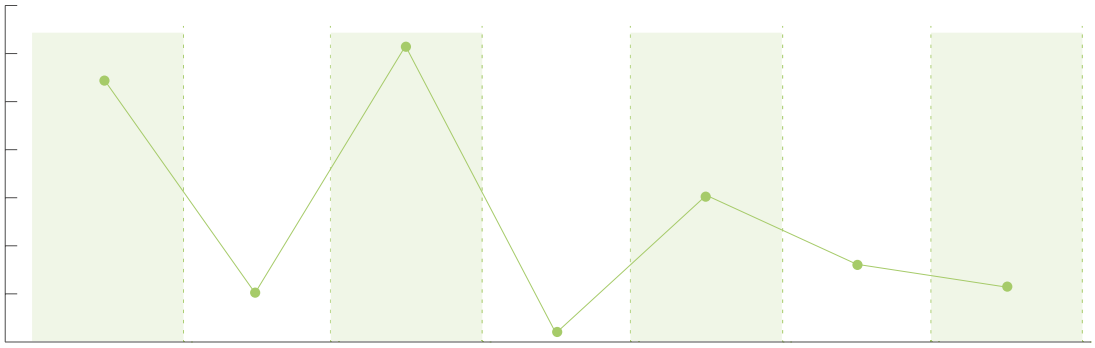
—HSÅQ r æ{ m¸Zó&Œk0R•R…5ˆ+óO_R¼,"æw æxIô'2&Œ/@(Yæw æxB¨(ræ{ m¸Zó&Œk0•åKJ 'ñ&ŒB¨(ræ{,&&¥5BRc'ñ&Œ n[Wˆ s ˆ 'ñ&Œ1$&r™4'ñ&Œ0P/Q n 1$ o



5C Zó&Œk0R•R…/@(Yx«6 —HSÅ

Zó&Œk0R•R…B¨(r•d&Œ

—HSÅQ r æ{2A&ŒRj. nr"(Rj. /úv×i •d&ŒPý^a\N=Ö© Zó&Œk0m¸®÷•åB¨(r•d&Œæ{0ZPžæ{R•R…5ˆ)LG 'a&Œ n'\ž •XœÕ DŠv0/ú-Vž#&ŒB¨(rm¸Zñ(¾&òœÅ± æ{0P/Q n æ{•åKJ,&(n•d&Œm¸Zó&Œk0Zñ(¾m»&v™È&gIí o



'\ž •XœÕ O…€«/ú 2A&ŒRj. x«OÒ.Ê(d€«)LG 'a&Œ ¡„• 5‘'a&Œ ‚&'-•d&Œ
DŠv0-Vž#&Œs0pG•d&Œ r"(Rj. 1$; &Ù&Œ
v×i •d&Œ

5C Zó&Œk0R•R…B¨(r•d&Œ—HSÅ

Zó&Œk0[•ß^ˆž¤—HSÅ

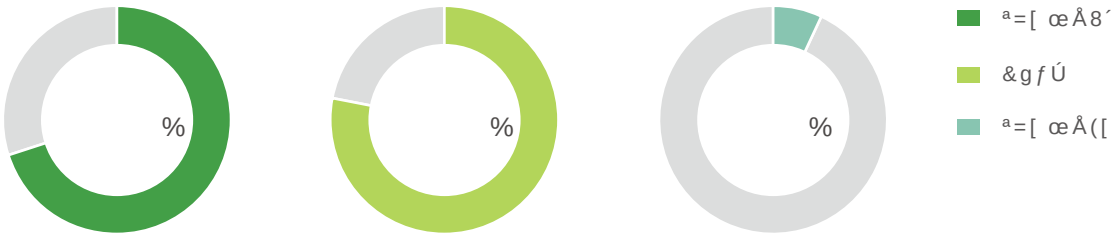
± •ßZó&Œk0RR&º'³¡wk=m¸&rs+[•ß^ˆž¤&¹=Ö© }F}Im¸K8•ô(¤=ÖT%0 BÒm¸K8•ô)LG 1$k='ƒ/@(YƒH— ^ˆž¤ q&&¥æ{ }_8Ð8´O¨m¸± •ßZó&Œk0Pýž •B=Ö© ™4_B[•ßÍí. o

5C Zó&Œk0[•ß^ˆž¤—HSÅ

Zó&Œk0?`&Œ/ •CÞ—HSÅ

Zó&Œk0r"(ª=[CÞ—HSÅ

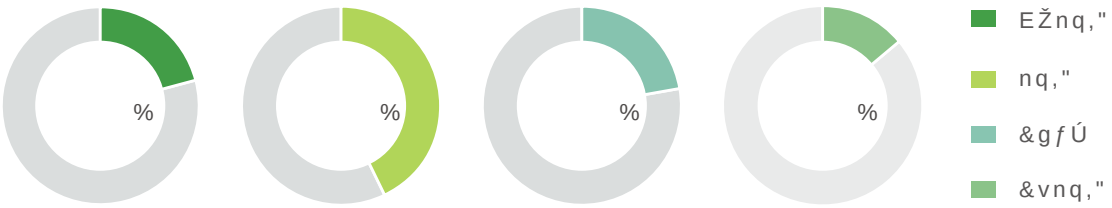
? '5ƒHB¹J>=Ö&•&Œr"(ª=[s•CÞm¸n•\•æ{Rc m¸Zó&Œk0–é&¹r"(ª=[œÅ8´æ{ m¸Zó&Œk0–é&¹&gƒÚæ{ –é&¹ª=[œÅ([o



5C Zó&Œk0r"(ª=[CÞ—HSÅ

Zó&Œk0J>=Ö&•&Œ&xB¨(rm¸nq,"s•CÞ

? '5&•&Œ&xB¨(rm¸nq,"CÞæ{••r na-xm¸B¨(r&xJ>=Ö&•&Œ/ •CÞö³EŽnq,"ö´Iôö³nq,"ö´m¸Zó&Œk0/Q æ{–é &¹&•&Œnq,"CÞ&gƒÚm¸/Q æ{–é&¹&•&Œ/ •CÞö³&vnq,"ö´m¸Zó&Œk0/Q o



5C Zó&Œk0J>=Ö&•&Œ&xB¨(rnq,"s•CÞ

?`&Œ fμ„€B¨(r

BEIJING
JIAOTONG
UNIVERSITY

01 ¬Ý?{— –ææ{O_v;)B©{æ{}i}o>$2¤?`&ŒB¨(r(d-VDŠ—

^a\N=Ö© ?`&ŒB¨(r5ÏKo'ÄRj. &¹>:P‹æ{'Ä?`&Œ&¹? 0bæ{^?.ÊO…€«O…=ÖOV« æ{&vP -/P 'ƒJ^6Æ,.W·D- o=Ö© . E 8Ð=Ök0•ß&Œ0 ?•&x?`&ŒKw? —Cs•DŠ— æ{'¢—Cs•— ~( nO…=ÖnaSû nO…=Ö,;>, nO…=ÖW·D- nO…=Ö}F}I&xv×i v P0« •s•d'+“ …´.Ê&xy¹}a.Êm¸v×i oD“— '+'Ä6Æ,.8Ð=Ök0•ß&Œz ,. nEñi z ™ v &¹&º¬ÿm¸Q\•ÓF•–÷Càæ{0ZPž&òž •B 0Ps+B×™46Æ–òæ{•s&gYÿL¿± '+=Ö© ?`&ŒKw? B¨(r'ƒ0×m¸&•&Œ.Ê[•C, o

=Ö© ?`&ŒB¨(r¬í? ?-}FIí0×}a&gF|GÝæ{z >™ •0Væ{•s&gYÿ>$2¤'+ö³+óO_¬í? KqBÔæ{&ºv×ŸÈ¨v}av,/8—Hæ{© y¹&º (d>JP6ˆE>Jæ{•ß•JŸÈ8…, . OEKoæ{, T%B×k0, 0Z. . ö´m¸'@(Y&g(dZó&Œk0?`&ŒB¨(rTT?wæ{ˆ ž#Zó&Œk0?`&ŒB¨(r m¸„{9ih 7¯ o

02 T%'ñ0V(ræ{- x«C Jœæ{&vP L¿/.?`&ŒKw? Rj. •J.

^a\N=Ö© &¹L¿/.Zó&Œk0?`&ŒuJ'0. æ{ 0bZó&Œhô})D“— '+w•ß&Œk0]Æ“ -" xw8Ð=Ök0?`&ŒKw? xwv•/Ž-V(r xw« — J®B« xv ?`&Œnq,"–÷Cà o5ˆ=Ök0}~0Vz ™ 6Æ,.P0« æ{=Ö© sdS'D“?•r"(>Jš(æ{–î=Ök0P•Ly“Xr"(æ{'+“R5BG”æ{ . E i GÝ)LFAO…€«1$'ƒTT7Už# o5ˆ“Š(›gO…&¥Eg1‡'+=Ök0m¸'ß)é“ &xKJ&Œ“ ö<D“?•},FAö³&g'3 Ö &ðö´•X. v y¹ -)] . æ{D¸? C›8Ð0Z=ÖsdS'š(•dr"(&º&ÐTMEñ'ß)é“ æ{PÈpÁªìCƒ™ 'äö<f65B†}T%æ{-LrO5BRRª='³m¸5‘P0/á o

0ZPžæ{. E ?`&ŒRj. B¨(ræ{?`&ŒRj. ™ ¡€,"y¹-LZó&Œk0- ›g-Dn$æ{PýZó&Œk0? =Ö© ?`&ŒB¨(r_ØH &x0„m¸¡~'³•, ¡€KwSû o=Ö© sdS'pGtU( .Ê?`&ŒRj. m¸P F|š P P0\•æ{+Î- -Dk=)LG .Ê}ø}^J®R© o¦Ï? Zó&Œk0m¸Rû— RûkOæ{=Ö © &šTTJ„•dö³®÷Ly™ ™ -Vö´æ{J>Rc?`&ŒB¨(r'ƒ0×5²¬âcšG”•cEñ5“”Rv7Zó&Œk00Px«1P—'æ{— ›g8…5‘&¹Zó&Œk08…i 0P¬à?`&Œ'2. æ{C . Zó&Œk0>Jh¡R?± ™ ¡€m¸?`&Œ o

03 , « —HSÅæ{s0=Ö- S@æ{tr- ?`&Œ? O…€«O…=Ö/ÿ®é(rk=

^a\N=Ö© ž •B/úPž- S@Zó&Œk0?`&Œg ,ƒæ{. E BÑ5ž—HpG1$s0=Ö¬ë]5æ{LMLãBÑ5žª=[ m¸0 .Ê™‹.7v P0D-æ{? ?`&Œ m¸/ÿ®é)LG (r&¹-V>AK8k0–æ-" n&•&Œ— ~(/ú—HO® n-V>A'ƒJ^6Æ,.P0Tim¸¡~'³(ÜL æ{'¢•\6Æ,._Ø™Èr"(ª=[C‡,(RcBÑ5žuJ'0. m¸Zó&Œk0 o

5ˆK8k0P0« æ{? '5•v}o,ÜCƒ?`&Œhg* ([m¸&•&ŒQ}*"K8k0Iô•ÓE2,¸?1K8k0O¨ö<Rc'Hr"( ª=[ 8Ðm¸&•&Œ•ÓE27Þ. K8 k0O¨æ{0ZPžæ{TOL ?`&ŒO¨L •ÓE2. E K8k0>R(æ{0¨D¸Zñœ Å(s m¸k0_Bæ{ENIíK8k0 nO…=Ö6Æ,.1$?`&Œm¸„{F•EÄh o

5ˆ=Ök06Æ,.P0« æ{sdS'? 'ñ&Œ}5, 'ƒJ^6Æ,.m¸•Bs•&¥æ{? =Ök0?`&Œ(r&¹6Æ,.m¸¡~'³/ÿ®éæ{•s&gYÿˆE>J>Jš(O…=Ö B¨(r o©enáB>{}Q]8m¸0 ?•æ{'ƒJ^ª=[ æ{'ƒJ^}US,m¸ •~(&ò5ˆ0 k00 .Êæ{± })J®R©'ƒJ^m¸ª=[ Ií&¹'+&g€…&v03 FP“ m¸`Ð](æ{ h¡5ˆm¸± •ß=Ök0C¾—*J¾ƒHgm¸(™ŠF•n«Yû0 K¦C‡-Dk=™pRûæ{LMLã>Jš(J®R©æ{? '5'š0_m¸0 ?•PýEŽ ¡~'³m¸ oJ>'Ä± •ß=Ök0?M,&'³\¤H >Jš(•J. m¸6Æ,. o•[,ÜCƒRûæ{Iî'Ì=Ö© 1$.Ì'i, , '\ž ©Ë5 >P•X- , 0@'Ä/ú)B)]- , 0@0V(ræ{DŠu(=Ök0>Jš(O…=Öm¸C,05æ{–î=Ök0/á'ñ&Œ>J&ôæ{i –ÿ•ëy¹>Jš(æ{© '+=Ö&ônq,"m¸i –ÿoü— æ{ &òšN>JLMLãnqC¾m¸>Jš(J®R©æ{L¿± ƒH›gm¸}~0Vz ™ æ{&¹'Ä0_m¸?`&Œ/ú0 ?•Jg&t5Ï>Jm¸6Çp„ o

03 ,"\¤™ ¡€æ{E .Ê•Åšvæ{S,DŠZó&Œk0?`&Œ™ ¡€— 'ßKwSû(dy¹

}U0V.Ì'i'\ž 8Ð=Ö± •ß=Ök0'ƒJ^6Æ,.>A(Yæ{^a\N=Ö© 5ˆ— 'ßZó&Œk0?`&Œ™ ¡€KwSû(dy¹&¥æ{P•¡~“ •v}osØ>Am¸?` &Œhgæ{ö\¤¡~Zó&Œk05B,;^?ž# n5B8ª^?ž# n?`&Œ/@(Y•d&Œ n/ 6– n/@(YF•™ v KwSû o0ZPžæ{ž •B, TKR¥¨|/w—HSÅæ{ '+“R± •ßZó&Œk0? ?`&Œ}USSm¸_ØH CÞæ{LMLãZó&Œk05ˆ[•ß•Bs•&¥,"'5=Ös0&•&Œm¸r"(ª=[CÞ n=Ös0&•&Œ&xB¨(r @ (Ym¸nq,"CÞ nO…€«?{Yƒ&xB¨(r@ (Ym¸/ •CÞ n8Ð=Ö•J. 6Æ,.? B¨(r'³[m¸_Ø™Ès•CÞv , « m¸O¨L TKR¥ o}Q•B O¨L 8…i &x- S@æ{ENIí}U–ÿæ{0Vi — 'ß=Ö© /ú=Ö© m¸0P¬àB¨(ræ{0ZPž&¹=Ö© m¸, « ^?.ÊOV« L¿(Ø(ÜL o