

&DVH :HVWHUQ 5HVHUYH 8QLYHUVLW\

&DVH :HVWHUQ 5HVHUYH 8QLYHUVLW\  
&KDUW RI \$FFRXQWV

\$VVHW \$FFRXQWV

%DQN &DVK  
&RPPHUFLDO &\$6+  
\$ 3 &KHFNV &\$6+  
3DWKVRQF+  
2QH WR 2QH )LWQHVV &\$6+  
6WXGHQW /RDQV XQGLQ  
&& 6HWWOHPHQW &\$6+  
3DUROO &KHFNV &\$6+  
/RDQV /21  
+5 /RFNER[ &\$6+  
3HWDVW 2SHQ  
'HQWLWVW  
7XLWLRQ /RFNER[ &\$6+  
7XLWLRQ &DVK &\$6+  
3DSDO &DVK &\$6+  
(QGRZPHQW &DVK  
&DVK )XQG .%DODQFLQ  
8QDSSOLHG &DVK  
8QDSSOLHG &DVK  
8QDSSOLHG &DVK  
8QDSSOLHG &UHGLW &DUG &DVK  
8QDSSOLHG 2WKHU &DVK  
8QDSSOLHG 'HQWDO &DVK  
8QDSSOLHG 7XLWLRQ &DVK  
8QDSSOLHG WR )LWQHVV &DVK  
8QDSSOLHG &DVK  
7HPSRUQVHVWPHQWV  
&DVK 5HFODVVLILFDWLRQ  
&DVK ,QWHUQDO /RDQV  
'HSDUWPHQW &DVK  
\$FFRXQWV 5HFHLYDEOH &OHDULQ  
\$FFRXQWV 1RWHV 5HFHLYDEOHV  
1RWHV 5HFHLYDEOH ,QW O /RDQV  
/RDQV 5HFHLYDEOH ,VVXH  
/RDQV 5HFHLYDEOH 3DLG  
8Q%LOOHG \$FFW 5HFHLYDEOH  
&RQWUDFWV 5HFHLYDEOH  
/HWWHU RI &UHGLW 5HFHLYDEOH  
0LVF 5HFHLYDEOH 2SHQ  
6DDBHFHLYDEOH 2SHQ  
6DDBHFHLYDEOH )ULQ

\$XJXVW

&DVH :HVWHUQ 5HVHUYH 8QLYHUVLW\  
&KDUW RI \$FFRXQWV

,QWLEOH 3HQVLRQ \$VVHWV  
\$ 5 \$GYDQFHV 7UDYHO 2,  
6WRFRVPPRQ 3UHIHUHG  
%RQGV \$QG 1RWHV  
5HDO (VWDWH  
,QW O SULQ SPW (GXFDWLRQ \*  
,QW O \$XQSLQW  
,QW O SULQ SPW 7UDQVIHUV  
,QW O SULQ SPW \*HQHUDO ,QVWL  
,QW O SULQ SPW 3ULYDWH \*LIWV  
,QW O SULQ SPW 2 0  
2WKHU ,QYHVWPHQW  
2WKHU %RUURZLQ /RDQ  
2WKHU ,QYHVWPHQW ,QWO /RDQV  
3RROHG ,QYHVWPHQW \$GYLVRUV  
,QYHVWPHQW &RQWURO  
2WKHU ,QYHVW ,QW O %RUURZLQ  
6WRFNV 2SHQ ,WHP  
%RQGV 1RW

\$XJXVW

&DVH :HVWHUQ 5HVHUYH 8QLYHUVLW\  
&KDUW RI \$FFRXQWV

\$FFXP 'HS\$4F 33(  
1RQ \*RY W &RQVWUXFWLRQ  
1RQ \*RY W &,3 0RYDEOH (TXLS  
\*RY W &RQVWUXFWLRQ  
\*RY W &,3 0RYDEOH (TXLS  
% %JGV &,3 6LWH 3UHSUDUDWLRQ  
&,3 3UH &RQVWUXFWLRQ &RVWV  
&,3 3UH&RQVW 6XUYH  
&,3 6LWH 3XUFKDVH  
&,3 3UH&RQVW 7HVWLQ  
&,3 2WKHU 6LWH 3UHS &RVWV  
% %JGV &,3 JQH&RVWV  
&,3 'JQ&RVWV  
&,3 3UH&RQVW (QYLU \$VVHVPHQW  
&,3 'JQL\$UFKLWHFW )HH  
&,3 'JQL(QQHUYH  
&,3 'JQ/6HFRQ\$UFK (Q  
&,3 \$GGLWLRQDO 6HUYLFHV  
&,3 3UH&RQVW \*HRWHFK %RULQ  
&,3 'JQL6SHFLDO &RQVXOWDQW  
&,3 6SHFLDO &RQVXOWDQW )HH  
&,3 'JQL5HLPE ([S \$UFK (Q  
&,3 'JQL2WKHU  
&,3 3UH&RQVW (VWLPDWLQ  
&,3 3UH&RQVW 2WKHU  
&,3 3UH&RQVW 6FKHGXOLQ  
&,3 'JQL&RPPLVVLRQLQ  
&,3 'JQL6LWHZRUN /DQGVFDSLQ  
% %JGV &\$SPLQ &RVWV  
&,3\$GPLQ &RVWV  
&,3 \$GPLQLVWUDWLYH &RVWV  
&,3 \$GPLQ 5LWPHQW  
&,3 \$GPLQ %OXHSULQWV 6SHFV  
&,3 3UH&RQVW5HQGHULQ  
&,3 \$GPLQ 2WKHU &RVWV  
&,3 \$GPLQ 6XVW&BUQDELOLW  
% %JGV &,3 &RQVWUXFWLRQ &RVW  
&,3 &RQVWUXFWLRQ &RVWV  
&,3 &RQVW 2ZQHU 3XUFKDVH  
&,3 &RQVW \*HQ &RQWUD &RQVW 0  
&,3 &RQVW +D] 0DWUO \$EDWHPHQW  
&,3 &RQVW (OHFWULFDO  
&,3 &RQVW 0HFKDQLFDO  
&,3 &RQVW 6HF(XWHWQO  
&,3 &RQVW\6SHFLDOW  
&,3 &RQVW&RVWOLW  
&,3 &RQVW 'HPROLWLRQ  
&,3 &RQVW 2WKHU &RVWV  
&,3 &RQVW %QYLUHGRSH  
&,3 &RQVW &DUSHWLQ  
&,3 &RQVW )LUH \$ODUP

\$XJXVW

&DVH :HVWHUQ 5HVHUYH 8QLYHUVLW\

&DVH :HVWHUQ 5HVHUYH 8QLYHUVLW\  
&KDUW RI \$FFRXQWV

&RQWUD \$FFRXQW )L[HG \$VVHWV  
)L[HG DVVHW HUURU DFFRXQ  
(TXLSPHQW HUURU DFFRXQW  
,QYHVWPHQWV 83 6WRFN  
,QYHVWPHQWV 83 %RQGV  
,QYHVWPHQWV 83 5HDO (VWDWH

\$XJXVW

&DVH :HVWHUQ 5HVHUYH 8QLYHUVLW\  
&KDUW RI \$FFRXQWV  
1HW \$VVHW \$FFRXQWV  
ïïðíí & Œ o >} v• r Z (µv o  
ïïðõìì ^µŒ%oµ•  
ïïðõíí v š} š  
ïïðõìì W Å>ð>Å? ?P>Ð>Å

\$XJXVW

&DVH :HVWHUQ 5HVHUYH 8QLYHUVLW\  
&KDUW RI \$FFRXQWV

,QFRPH \$FFRXQWV

điñií WŒ}}Œ z Œ dμ]š}}v

điñií Z Pμo Œ dμ]š}}v

điñiíó hv ŒPŒ dμ]š}}v oo} š}}v

điñií

\$XJXVW



&DVH :HVWHUQ 5HVHUYH 8QLYHUVLW\

&DVH :HVWHUQ 5HVHUYH 8QLYHUVLW\  
&KDUW RI \$FFRXQWV

điòñíi }œu]š}œ] • Z Pμo œ  
điòñîi }œu]š}œ] • KšZ œ  
điòñïi &}} ^ œÀ] •  
điòñđi μÆ]o] œÇ ^ œÀ] •  
điòññi Z œP |•  
điòñòi μÆ]o] œÇ ^ œÀ] • %o %o œ } %o œ X  
điòñói&}} ^ œÀ] r KšZ œ  
điòñôiD u œ•Z] %o μ •  
điòñõi/v]š] š]}v & •  
điòòii

&DVH :HVWHUQ 5HVHUYH 8QLYHUVLW\  
&KDUW RI \$FFRXQWV

đííííò Z o• r ^šµ v š ^ ŒÀ] •  
đííííó Z o• r µÆ]o] ŒÇ v š Œ%Œ]• •  
đííííô Z o• r %Œ ] š}}v Æ% v•  
đííííõ Z o• r dµ]š}}v ~ & •  
đííííî Z o• r /vÁ •š u v š /v }u  
đííííí Z o• r ^šµ v š &]v v ] o ]  
đíííîò %Œ%Œ}Œ%Œ] š}}v r /v•šŒµ š}}v o  
đíííîó %Œ%Œ}Œ%Œ] š}}v r ^%Œ}v•}Œ Z •  
đíííîô %Œ%Œ}Œ%Œ] š}}v r KšZ ^%Œ}v• Z •  
đíííîõ %Œ%Œ}Œ%Œ] š}}v r >] Œ Œ] •  
đíííîî %Œ%Œ}Œ%Œ] š}}v r K%Œ ~ D ]v š  
đííííí dŒ v•( Œ• r W o v š K~D  
đííííî dŒ v•( Œ• r µ š}}v ~ ' v Œ o  
đííííï dŒ v•( Œ• r µÆ]o] ŒÇ v š Œ r•š  
đííííð dŒ v•( Œ• r µÆ]o] ŒÇ v š Œ r}š Z  
đííííñ dŒ v•( Œ• r KšZ ^%Œ}v•}Œ WŒ i  
đíííîò dŒ v•( Œ• r ^%Œ}v•}Œ Z~d  
đíííîó dŒ v•( Œ• r' ]v|>}•• W o š •• š  
đíííîô dŒ v•( Œ• r KŒ P v]ì š]À]šÇ  
đíííîõ dŒ v•( Œ• r ^šµ v š ^ ŒÀ] •  
đííííî %Œ%Œ}Œ%Œ] š}}v r ^šµ v v dŒ x!À]šÇ

&DVH :HVWHUQ 5HVHUYH 8QLYHUVLW\  
&KDUW RI \$FFRXQWV

([SHQVH \$FFRXQWV  
6DODU\ \$FFRXQWV

)DFXOW\ &RQWURO  
3URIHVVRUV )XOO 7LPH  
3URIHVVRUV 3DUW 7LPH  
\$VVRF 3URI )XOO 7LPH  
\$VVRF 3URI 3DUW 7LPH  
\$VWV 3URI )XOO 7LPH  
\$VWV 3URI 3DUW 7LPH  
,QVWUXFWRUV )XOO 7LPH  
,QVWUXFWRUV 3DUW 7LPH  
7HUP )DFXOW\  
(DUO\ 5HWLUHHV  
9LVLWLQJ 3URI )XOO 7LPH  
9LVLWLQJ 3URI 3DUW 7LPH

**\$FDGHPLF 6XSSRUW 6WDII &RQWURO**  
\*UDGXDWH \$VVLVWDQWV  
3URI 'HJUHH 6WXGHQW )XOO 7LPH  
&ROOHJH :RUN 6WXG\ 6WLSHQGV  
\*UDG 1RQ 7D[ 7XLWLRQ 'HGXFV  
6XSSOHPHQWDO 3D\  
\*UDGXDWH 7XWRU  
\*UDGXDWH 6WXGHQWV 3DUW 7LPH  
\*UDG 6WXGHQW Z \$SSW 1RW (QUROO  
\*UDGXDWH 6XPPHU 6WLSHQG  
6SHFLDO /HFWXUHUV  
7HDFKLQJ \$VVRFLDWHV  
5HVHDUFK 6FKRODUV

**5HVHDUFK 3HUVRQQHO &RQWURO**  
5HVHDUFK \$VVRFLDWH  
5HVHDUFK 6FKRODUV  
6HQLRU 5HVHDUFK 6FLHQWLWV  
3ULQFLSDO 5HVHDUFK 6FLHQWLWV  
5HVHDUFK 3URIHVVRU  
5HVHDUFK \$VVRFLDWH 3URIHVVRU  
5HVHDUFK \$VVLVWDQW 3URIHVVRU  
6HQLRU 5HVHDUFK \$VVRFLDWH  
7HUP 5HVHDUFK 3HUVRQQHO

**6WXGHQW &RQWURO**  
6WXGHQW +HOS 8QGHIJUDGXDWH  
6WXGHQW +HOS \*UDGXDWH  
'RUPLWRU\ &RXQVHORUV  
8QGHIJUDG 6WXGHQW 1RW (QUROOHG  
\*UDGXDWH 6WXGHQW 1RW (QUROOHG  
6WXGHQW ,QWHUQ 1RW (QUROOHG

\$XJXWV

&DVH :HVWHUQ 5HVHUYH 8QLYHUVLW\  
&KDUW RI \$FFRXQWV

\$XJXVW

&DVH :HVWHUQ 5HVHUYH 8QLYHUVLW\  
&KDUW RI \$FFRXQWV

&DWDORJV 3XEOLFDWLRQV  
%RRNV 3HULRGLFDOV 2WKHU 3XE  
&RPSXWHU 6RIWZDUH  
2QOLQH 7UDQVDFWLRQ 'HIDXOW

,QWHUQDO 6HUYLEFHV &RQWURO  
,QWHUQDO %LOOLQJ 0RYHUV  
,QWHUQDO &RPSXWLQJ &KDUJHV  
,QWHUQDO %LOO 3DSHU 6KUHGGGLQJ  
,QWHUQDO %LOO 'LYHO\ 5HQWDO  
,QWHUQDO %LOO ,7  
,QWHUQDO %LOO ,QVXUDQFH  
,QWHUQDO %LOO &DOO &WU &KDUJH  
,QWHUQDO 3URYRVW )XQGLQJ  
,QWHUQDO %LOO 'HVLJQ )DE &WU  
,QWHUQDO %LOO 5RRP 5HQWDO  
,QWHUQDO %LOO /DE 6HUYLEFHV  
,QWHUQDO %LOOLQJ 3& 6RIWZDUH  
,QWHUQDO %LOOLQJ /DE 6XSSOLHV  
,QWHUQDO %LOO )LOP 3URFHVVURU  
,QWHUQDO %LOOLQJ &)\$5  
,QWHUQDO /LFHQVHV 3HUPLWV  
,QWHUQDO 6HUYHU 6WRUDJH 6HUY  
,QWHUQDO 6RIWZDUH &WU  
,QWHUQDO %LOO 2IILFH 6XSSOLHV  
,QWHUQDO %LOO 3RVWDJH  
,QWHUQDO %LOO )RRG 6XSSOLHV  
,QWHUQDO &KHPLFDO :DVWH 'LVS  
,QWHUQDO %LOO &RS\ &KDUJHV  
,QWHUQDO &RQIHUHQFH 6HPLQDU  
,QWHUQDO (YHQW &RS\LQJ 3ULQW  
,QWHUQDO %LOO 5HSDLU &HQWHU  
,QWHUQDO %LOO :LQG \*HQ (OHFW  
,QWHUQDO %LOO 8QLY +HDOWK 6HUY  
,QWHUQDO %LOO 3ODQW 6HFXULW\  
,QWHUQDO %LOO 8VHU )HHV  
,QWHUQDO %LOO &DPSXV 6HUYLEFH  
,QWHUQDO \$QLPDO )DFLOLWLHV  
,QWHUQDO %LOO &:58QHW  
,QWHUQDO %LOO 3URJUDP 6XSSRUW  
&RVW &HQWHU &KDUJHV

2XWVLGH 6HUYLEFHV &RQWURO  
7HPSRUDU\ +HOS  
3URIHVVLQRDO &RQVXOWLQJ  
&RQVXOWLQJ )OH[ %HQHILWV  
,7 &RQVXOWLQJ  
,7 0DQDJHG 6HUYLEFH 3URYLGHU  
&RQVXOWDQW 3DUWLFLSDQW 7UDYHO  
\$ 3 0LVF 2XWVLGH 6UYF 3UH SD\  
,7 &ORXG 6HUYLEFH 3URYLGHU  
0DUNHWLQJ /HDG \*HQHUDWLRQ

\$XJXVW

&DVH :HVWHUQ 5HVHUYH 8QLYHUVLW\  
&KDUW RI \$FFRXQWV

6WLSHQGV \$OORZ 1RQ &:58  
3ODQW 6HFXULW\  
5R\DOWLHV  
2WKHU 3DUNLQJ 6HUYLEFHV  
3DWLHQW &DUH  
6DODULHV )ULQJH %HQHILWV  
2WKHU 3XUFKDVHV  
0DNHWLQJ 3KRWRJUDSK\  
&DEOH 6HUYLEFHV  
5HLPXUVH )RUHLJQ &RQWUDFWRU  
6WXG\ 3DUWLFLSDQWV  
6XEFRQWUDFWV  
&/&0 &)& URVVELOOV

7UDYHO 5HODWHG ([SHQVHV &RQW  
7UDYHO 9LVLWRUV  
7UDYHO &:58 (PSOR\HH  
7UDYHO 7UDLQHH  
7UDYHO 6WXGHQWV 1RQ (PSOR\HH  
&RQIHUHQFHV 6HPLQDUV  
+RQRUDULD 2QO\  
(QWU\ )HHV 6WXGHQW \$FWLYLW\  
'XHV \$VVRF 2UJDQL]DWLRQV  
(YHQW 7UDYHO  
(YHQW +RVSLWDOLW\ )RRG  
0RYLQJ ([SHQVHV ,QGLYLGXDO  
5HFUXLW 7UDYHO \$LUIDUH  
0RYLQJ ([SHQVHV \*HQ O /DE  
5HFUXLW 7UDYHO \*URXQGV 7UDQV  
5HFUXLWVSTLWVWRW\ )RRG  
)DFXOW\ 5HFUXLWLQJ  
/LYLQJ ([S )RUHLJQ 9LVLWRUV

&RPPXQLFDWLRQV 6KLSSLQJ &WO  
7HOHSKRQH  
&HOO 3KRQH &KDUJHV  
1HWZRUN &KDUJHV  
7HOHJUDSK  
3RVWDJH  
0DUNHWLQJ 0DLOKRXXVH  
([SUHVV 6KLSSLQJ  
5HFUXLW 3RVWDJH )HHV VW &OV  
)UHLJKW ([SHQVH  
0DUNHWLQJ /HDG \*HQ 3RVWDJH  
,QWHUQDO 0RYLQJ

\$XJXVW

&DVH :HVWHUQ 5HVHUYH 8QLYHUVLW\  
&KDUW RI \$FFRXQWV

**(TXLSPHQW &RQWURO**

0DMRU (TXLSPHQW 2SHU (TXLS  
&RQWUD \$FFRXQW (TXLSPHQW  
0DMRU ,7 (TXLSPHQW 2SHU (TXLS  
&RQWUD \$FFRXQW ,7 (TXLSPHQW  
0DMRU (TXLSPHQW \$XWR 7UXFNV  
&RQWUD \$FFRXQW \$XWR  
%OGJ \$GGLWLRQ ,PSURYH  
\$PRUWL]DWLRQ 3ULRU <HDU

**5HQWDO &RQWURO**

(TXLSPHQW 5HQWDO  
(YHQW 7UDQVSRUDWLRQ  
%XLOGLQJ 5HQWDOV  
&RSLHU 5HQWDO  
(TXLSPHQW /HDVHV

**,QGLUHFV &RVW 5HFRYHU\ &RQWURO**

,QGLUHFV &RVW ([SHQVH  
,QGLUHFV &RVW ([SHQVH  
,QGLUHFV &RVW ([SHQVH  
,QGLUHFV &RVW ([SHQVH  
,QGLUHFV &RVW ([SHQVH

**([SHQVH (UURU &RQWURO**

,QWHUIDFH (UURUV

**0DLQW 0DWHULDOV 6XSSOLHV**

0DLQW 0DWHULDOV 6XSSOLHV  
\*DV 2LO 9HKLFOHV

**8WLWLHV &RQWURO**

1DWXUDO \*DV  
&KLOOHG :DWHU  
(OHFWULFLW\  
:DWHU 6HZDJH  
+HDW 6WHDP 3RZHU

**0DLQWHQDQFH 5HSDLUV &RQWURO**

0RY (TXLS 0DLQW &RQWUDFWV  
0RY (TXLS 0DLQW 5HSDLUV  
\$FDGHPLF 5HQHZDO 5HSODFHPHQW  
\$\$ 8SJUDGHV  
6DIHW\ &RPSOLDQFH  
(OHYDWRU 5HIXUELKPHQW  
([WHULRU 5HVWRUDWLRQ  
.H\ 5HFRULQJ  
3XEOLF \$UHD 5HQHZ 0LVF 3URM  
2WKHU )DFLOLWLHV 0DLQWHQDQFH  
)LUH 6\VWHPV  
3ODQW 0DLQW 6HUY ,QWHUQDO  
3ODQW 0DLQW &RQWUDFWV

\$XJXVW



&DVH :HVWHUQ 5HVHUYH 8QLYHUVLW\  
&KDUW RI \$FFRXQWV

\$XJXVW

&DVH :HVWHUQ 5HVHUYH 8QLYHUVLW\  
&KDUW RI \$FFRXQWV

'HSU &RPSXWHU !  
'HSU 7HOHSKRQH 6\ VWHP  
'HSU 9HKLFOHV  
'HSU /DQG ,PSURYHHPHQWV  
'HSUHF \$52 33(

\$XJXVW

&DVH :HVWHUQ 5HVHUYH 8QLYHUVLW\  
&KDUW RI \$FFRXQWV

,QW &DQFHO &ORVHG 6FKOV  
&ROOHFWLRQ )HHV  
&UHGLW %XUHDX )HHV  
\$GPLQLVWUDWLYH 2YHUKHDG  
3ULQF &DQFDO \$VVLJQPHQW  
,QW &DQFHO \$VVLJQPHQW

**3ULQFLSDO ,QWHUHVW**  
3ULQFLSDO 3DLG  
,QWHUHVW ([SHQVH  
\$52 \$FFUHWLRQ

**6FKRODUVKLSV &RQWURO**  
7XLWLRQ )HHV  
6WLSHQGV  
6WXGHQW +HDOWK &DUH 6XEVLG\  
)HOORZVKLSV 7UDLQHHV &RQWURO  
3UHGRF )HOORZ 6WLSHQGV  
3UHGRF )HOORZ JQ  
3UHGRF )HOORZ 7XLWLRQ )HHV  
3RVWGRF )HOORZ 6WLSHQGV  
3RVWGRF )HOORZ 7XLWLRQ )HHV

**3ULJHV \$ZDUGV &RQWURO**  
3ULJHV DQ€ ? €ÖL UCña †4pĐÔ: 3)0ĐÀ 0 dX| €

\$XJXVW

&DVH :HVWHUQ 5HVHUYH 8QLYHUVLW\

&DVH :HVWHUQ 5HVHUYH 8QLYHUVLW\  
&KDUW RI \$FFRXQWV

\$XJXVW