

(& 21 0RQHWDU\ (FRQRPLFV ,,
&DSLWDO 0DUNHW , ~~DSHUFDFWV RQ FVWXLQ~~ DQG)L
'HYHORSPHQW %XVLQHVV &\FOH DQG *URZ

)DOO
0DORQH\ +DOO 7 7+

3URI)DELR 6FKLDQW DUHOOL
5RRP 0DORQH\ +DOO
7HO
(0\$, / VFKLDQWD#EF HGX
2IILFH KRXUV 7 7K DP

6\OODEXV DQG 5HDGLQJ /LVW
\$XJXVW

&RQWHQW ,Q WKLV FRXUVH , ZLOO ~~WDOO~~ ~~OPDW~~ ~~NKWH~~ ~~ILQSWHU~~
LQYHVWPHQW EXVLQHVV F\FOH IO ~~LFQX~~ ~~DRXL~~ ~~RQW~~ ~~KDQ~~ ~~GT~~ ~~XUV~~
H[WHQVLYH UHGGLQJ OLVW VR ~~WR~~ ~~WH~~ ~~FX~~ ~~SW~~ ~~H~~ [SOWR ~~WHO~~
VXE WRSLFV ZLOO EH FRYHUHG LQ ~~XG~~ ~~ZI~~ ~~WDL~~ ~~CE~~ ~~HG~~ ~~XIQ~~ ~~FOR~~ ~~X~~ ~~WVKJH~~
LQYHVWLJDWH VRPH RI WKH LVVXH ~~G~~ ~~R~~ ~~Q~~ ~~S~~ ~~X~~ ~~UH~~ ~~RZ~~ ~~LO~~ ~~OZ~~ ~~GW~~ ~~VF~~
ERWK WKHRUHWLFDQ DQG HPSLU ~~Q~~ ~~E~~ ~~Q~~ ~~D~~ ~~E~~ ~~R~~ ~~Q~~ ~~M~~ ~~P~~ ~~I~~ ~~D~~ ~~E~~ ~~F~~ ~~X~~ ~~V~~ ~~R~~ ~~L~~ ~~B~~ ~~Q~~ ~~G~~
HYLGHQFH 7KH FRXUVH ZLOO DOVR ~~RI~~ ~~Q~~ ~~G~~ ~~F~~ ~~D~~ ~~X~~ ~~G~~ ~~H~~ ~~D~~ ~~V~~ ~~L~~ ~~R~~ ~~D~~ ~~W~~ ~~L~~ ~~R~~ ~~C~~
DQ HPSLULFDQ H[HUFLVH VHH HQG RI UHGGLQJ OLVW

/HFWXUH QRWHV \$ VHW RI OHFWXUR ~~X~~ ~~Q~~ ~~S~~ ~~WH~~ ~~Q~~ ~~R~~ ~~Q~~ ~~W~~ ~~K~~ ~~H~~ ~~D~~ ~~P~~
P\ JRRJOH SHUVRQDO ZHEVLWH
KWWSV VLWHV JRRJOH FRP D EF ~~J~~ ~~G~~ ~~X~~ ~~G~~ ~~K~~ ~~D~~ ~~E~~ ~~L~~ ~~R~~ VFKLDQW DU

\$VVLJQPHQWV DQG *UDGLQJ 6WXG ~~K~~ ~~Q~~ ~~W~~ ~~H~~ ~~Z~~ ~~H~~ ~~O~~ ~~J~~ ~~E~~ ~~H~~ ~~U~~ ~~H~~ ~~S~~ ~~R~~ ~~U~~
GLVWLQFW WRSLFV XVLQJ YHU\ ~~U~~ ~~K~~ ~~D~~ ~~F~~ ~~H~~ ~~Q~~ ~~W~~ ~~R~~ ~~S~~ ~~D~~ ~~I~~ ~~S~~ ~~H~~ ~~U~~ ~~D~~ ~~O~~ ~~D~~ ~~M~~ ~~V~~
SUHVHQWDWLRQ)LQDOO\ WKH\ ~~Z~~ ~~E~~ ~~D~~ ~~O~~ ~~L~~ ~~R~~ ~~Q~~ ~~H~~ [S ~~H~~ ~~U~~ ~~F~~ ~~F~~ ~~M~~ ~~G~~ ~~X~~ ~~M~~ ~~L~~ ~~C~~
GDWD WHFKQLTXHV *UDGLQJ ZLOO EH EDVHG RQ DOO WK

\$ &\$3,7\$/ 0\$5.(7 ,03(5)(&7,216),1\$1&,\$/ 6758&785(
,19(670(17 \$1' %86,1(66 &<&/(')/8&78\$7,216

&RUSRUDWH)LQDQFH 3ULPHU IURP WKH ~~P~~ ~~6~~ ~~H~~ ~~W~~ ~~D~~ ~~U~~ ~~L~~ ~~H~~ ~~F~~ 3UHI
,QIRUPDWLRQ DQG ,QFRPSOHWH &RQUDFWV

D 7KH 0RGLJOLDQL 0LOOHU 7KHRUHP ~~6~~ ~~D~~ ~~Q~~ ~~G~~ ~~F~~ ~~W~~ ~~K~~ ~~H~~ ~~U~~ ~~H~~ ~~U~~ ~~H~~ ~~O~~ ~~H~~ ~~Y~~ ~~D~~

0RGLJOLDQL) DQG 0 0LOOHU UD³ ~~W~~ ~~K~~ ~~R~~ ~~Q~~ ~~R~~ ~~L~~ ~~O~~ ~~D~~ ~~Q~~ ~~F~~ ~~H~~ ~~D~~ ~~S~~
WKH 7KHRU\ RI QYHVWPHQW \$PHULFDQ (FRQRPLF 5HY

&K LQ 6DUJDFQVWHFRQRPLVH7FRQRGJHGLWLRQ
E)LUPV1)LQDQFLDO 6WUXFWXUH XQQRPS\$VWPP&VQWFDQFM
:DOVK 0RQHWDU\ 7KH RU\ DQG 3R70BETHVV &K
-HQVHQ 0 DQG : 0HFNOLQJ 37KDIQU%HRKDWKRU)L
\$JHQF\ &RVWV DQG 2ZQHUVKLS 6WUQRW&EVH' SSRXUQDO
0\HUV 6 & DQG 1 6 0DMOXI 3QRHSWPEVW)L
'HFLVLRQV :KHQ)LUPV +DYH ,QIRUPDWL RQRXUKDDO ,RIYH
)LQDQFLDO (FRQRPLFV -XQH SS
6WLJOLW] - DQG \$:HLVV 3&ZLHWGLWPSBWIHFWL
,QIRUPDWLRQ' \$PHULFDQ (FRQRPLF 5HYLHZ -XQH SS
%HVWHU + 36FUHHQLQJ 9HUVXV 5DWLRQLQJ LQ

\$Q ,QWURGXFWRQ WR ,QWHUPHGLDWLRQ DQG %DQNLQJ

'LDPRQG ' DQG 3 '\EYLJ 3%DQNDQXQALTXLSRWLW\ -RXUQDO RI 3ROLWLFDO (FRQRPL -XQH SS

'LDPRQG ' 3%DQNV DQG /LTXISRWLW &RQDRWLWQH
'LDPRQG '\EYLJ 0RGHO' (FRQRPLF 4XDURWHLFXPR)GHUD
1 6SULQJ SS

-DFNOLQ & - 3'HPDQG 'HSRDLQV L V L V N D G K I D Q U L Q H V V
&RQWUDFWXDO \$UUDQJHPHQWV (RU' , Q W H H U V F W R W P S R D Q Q
:DOODFH (GV 0LQQHDSROLV 8QLYSJSJVLW\ RI 0LQQHV

'LDPRQG ')LQDQFLDO ,QWHUFRGLLQWL RQH D Q I S Z '
RI (FRQRPLF 6WXGLHV -XO\ SS

'LDPRQG ' 3)LQDQFLDO ,QWHURHWRWRQ D
(FRQRPLF 4XDUWHUQH %DQNURO 5LHFKPRXCPHURSS

%R\G - + DQG (& 3UHVFRWW 0LQLQDQFLDO ,QWHU
-RXUQDO RI (FRQRPLF 7KHUR\ \$SULO SS

'LDPRQG ' : 30RQLWRULQJ DQG WZHSXQV D%DLRQ
/RDQV DQG GLUHFWO\ 3ODFHG 'HEW9RORXUQDRI 3R
SS

5DMDQ 5 3,QVLGHUV DQG 2XWHLDGWHURQV 7KLS 8DQ
\$UPV /HQQWK 'HEW' -RXUQDO RI)LQDQFH SS

3HWHUVHQ 0 DQG 5 5DMDQ WLRQV%KLSWILWVGRHQ
IURP 6PDOO %XVLQHVV 'DWD' -RXUQDO RI)LQDQFH

%HUJHU \$ / .ODSSHU * 8GHOO DLQGLW\ *RHH%DLQNV V
/HQQ WR ,QIRUPDWLRQDOO\ 2SDTXH LQPDQDQG%XLVLDQHV
9RO SS

&DSLWDO 0DUNHW ,PSHUIHFWLRQV ,QYHWWXDPWHLQVQ VD Q G
0RGHOV DQG \$JJUHJDWH ,PSOLFDWLRQV

D)LQDQFLDO)ULFWLRQV DQG WKH)LQDQFLDRO \$FFPHIHU
°C

0DWVX\DPD . 3\$JJUHJDWH ,PS,DISFDWHLRQMRQV'&U
1%(5 0DFUR \$QQXDO
KWWS ZZZ QEHU RUJ ERRNVBLQBSURJUHVV PDFUR LC

*HUWOHU 0DUN FRPPHQW RQ .OLFDWVLRQDPRI3
&UHGLW 0DUNHW ,PSHUIHFWRQV' VHH DERYH IRU OLQ

%UXQQHUPHLHU 0 . 7 0 (LVHQEDFKFUDRQFRQ6DLQFLN
ZLWK)LQDQFLDO)ULFWLRQV D 6XUYH'\ 3ULQFHWRQ 8
KWWS VFKRODU SULQFHWRQ HGXGRDUNXV ILOHV VXUY

%HUQDQNH % DQG 0 *HUWOHU QG 3\$XMQGH&R&WFO
)OXFWXDWLRQV' \$PHULFDQ (FRQRPLF 5HYLHZ 0DUF

%HUQDQNH % DQG 0 *HUWOHU RQ3RPPQFLDO
3HUIRUPDQFH' 4XDUWHUO\ -RXUQDO RI (FRQRPLFV)HE

*HUWOHU 0 DQG 5 * +XEEDUG VLQH\VLQDQFLDO
)OXFWXDWLRQFLDQ 0DUNHW 9RODWLQW\ &DXVHV &
5HFRPPHQGDWLRQDO 5HVHUYH %DQN RI .DQVDV &LW\

&DUOVWURP & 7 DQG 7 6)XHUVWUWK DQ\$J%QFLQRY
)OXFWXDWLRQV \$ &RPSXWDEOH *HQHFDQ(FRQRPLFULX
5HYLHZ 'HFHPEHU SS

%HUQDQNH % 0 *HUWOHU DQG 6HWLQFLKFWLVRQV DQ
&\FOLFDO)OXFWXDWLRQ'0DFUR7RORUPIDQ 0 :RRGIR
HGV DYDLODEOH DOVR DV 1%(5 :RUNLQJ 3DSHU D

.L\RDNL 1 DQG - ORRUH 3RQHLQWLDQ(FRQRPLF
1 \$SULO SS

'PLWULHY 0 DQG - +RGGHQEDJK DQG 6³&RQD&RQWU
&RQWUDEFWV' PLPHR)68

5RPHU & ' DQG ' + 5RPHU 31HZ 7UDQGHVPEMVRQVH
0HFKDQLVP' %URRNLQJV 3DSHUV RQ (FRQRPLF \$FWLYL

5DPH\ 9 3+RZ ,PSRUWDQW LV WDKHV&LVHGLRW &RKD
0RQHWDU\ 3ROLF\"' &DUQHJLH 5RFKHLVW3RUO&RQIHUHQ
'HFHPEHU SS

%HUQDQNH % 6 DQG \$ 6 %OLQGHUDQG WK³H &K DQGHUOD
0RQHWDU\ 7UDQVPLVLRQ' \$PHULFDQ (FRQRPLF 5HYLH
%HUQDQNH % 0 *HUWOHU DQG DO \$LFFHCUHVDWRU DQ³
)OLJKW WR 4XDOLW\ 5HYLHZ RI (FRQRPLFVXDQG 6V DV

:DOVK & (DQG - \$:LOFR[3\$DQNY&WH'GLW- DQGH
DQG (5RVHQJUVHQ% DQGM /HQGLQJ ,PSRUWDQW I
0RQHWDU\ 3)RQGHUO 5HVHWYHQ &RQNHRIHQ RN 6HULHV 1F
SS

,DFRYLHOOR 0 DQG 5 0LQHWL QHW³DKH 3RULGLW
(YLGHQFH IURP WKH +RXVLQJ 0DUNHWSS-RXUQDO RI 0D

.DVK\DS \$ 1 - & 6WHLQ DQG ' : :LOFR[DQG &U³H BQW
&RQGLWLRQV (YLGHQFH IURP WKH &R³SRVLWDRQ RI
(FRQRPLF 5HYLHZ QR 0DUFK SS

20LQHU 6 ' DQG * ' 5XGHEXVK &UHGLW &RQVQWBR
(YLGHQFH IURP WKH &RPSRVLWLRQ RI (HWHUO)L
(FRQRPLF 5HYLHZ QR 0DUFK SS

1LOVHQ - + 37UDGH &UHGLW DQGRW³DKH DRIN /
0RQH\ &UHGLW DQG %DQNLQJ)HEUXDU\ SS

0RUJDQ ' 3 37KH &UHGLW (IIEGWQFRI 0RQHWDU
&RPPLWPHQWV' -RXUQDO RI 0RQH\ &UHGLW DQG %DQ

3HHN - DQG (5RVHQJUVHQ 37KH ,QWHUQDWLRQ

.DVK\DS \$. 2 \$ /DPRQW DQG - &GL6WHLRQV DQG W&K
&\FOLFDO %HKDYLRUXDIU, QYUQW-RUXIUM O R1 (F \$ QRPVW
SS

.DVK\DS \$ 1 - & 6WHLQ ³:K B Q/VGRQD%DLOONL RQ
DERXW WKH 7UDQVPLVLRQ RI 0RQHWBYLH ROLF\'' \$P
SS

(KUPDQQ (/ *DPEDFRUWD - 0DU\$WLQHP DJHV 3 6H

G)LQDQFLDO 6KRFNV)LQDQFLDQRPWHUPHGLDWLRQ

i) *Models without Financial Intermediaries*

-HUPDQQ 8 DQG 9 4XDGULQL)LQDQFLDQRPWHUPHGLDWLRQ
6KRFNV' \$PHULFDQ (FRQRPLF 5HYLHZRUNLQJ) BIESHIDU\

.KDQ \$ DQG - . 7KRPDV ³ & UHGXFWXIDRVLNRQ DQG
(FRQRP\ ZLWK 3URGXFWLRQ +HWHURQRPHLWQLY+RUKULQD

*HUWOHU 0 DQG 1 .L\RWDNL DQG) & Q B G E W D B R, Q L V F
%XVLQHVV & \F O B Q S G E R R N L V I' 0 R Q H W D U J 0 () F U L H R P L D F Q / G D Q C
0 :RRGIRU HG V YRO FK (OVHYLHU

&XUGLD 9 DQG 0 :RRGIRUG 3) & R Q D Y O I O W R Q R I O M D O U \ D
3ROLF\ ')5% RI 6W /RXLV 5HYLHZ -XO\ \$XJXVW

:RRGIRUG 0 DQG 9 &XUGLD 37 K H H W & H Q W U D D O %
, Q V W U X P H Q W R I 0 R Q H W D U \ 3 R O L F \ ') 5 % X O \ 1 H Z < R U N 6

*HUDOL \$ 6 1HUL / 6HVVD DQ G Q G 6% D Q R U E W W Q D ' 6 '
0 R G H O R I W K H (X U R \$ U H D ' - R X U Q D O R I 6 S Q H \ & U H G L W

\$GULDQ 7 DQG + 6 6KLQ 3) L O B Q F I W D D O U \, Q W H
(FRQRPL E B Q G E R R N R I 0 R Q H W D U J 0 () F U L H R P L D F Q / D Q G 0 : R R G
H G V (O V H Y L H U

\$GULDQ 7 DQG + 6 6KLQ 3) D Q H D O F L G O D Q X H U P V
5LVN')HGHUDO 5HVHUYH %DQN RI 1HZ <RUN 6WDII 5HS

%UXQQHUPHLHU 0 . DQG < 6DQQLNR G H O Z L W \$ D D F U
)LQDQFLDO 6HFWRU' 3ULQFHWRQ 8QLYHUVLW\ PLPHR
KWWS VFKRODU SULQFHWRQ HGX PDUNXV ILOHV PDFU

\$RNL . DQG . 1LNRORV %DQN 3% D E S E) L Q L D Q F L D P D P G H R
KWWS ZZZ HFE LQW HYHQWV FRQIHUHQFHV KWPO PDU

&KULVWHQVHQ , & 0HK DQG . 0RUBQ DQG 3/HV
0DFURHFRQRPLF '\QDPLF' PLPHR
KWWS ZZZ IHGHUDOUHVHUYH JRY D P Y K O W V F R Q I H U H Q F
& \ F O H V D Q G 0 D F U R H I
KWWS ZZZ HFE LQW

&KDUL 9 9 3 - .HKRH DQG (5 0F*U D W W M D Q D W L Y H
5HSUHVHQWDWLRQV 0HWKRGRORJL&V F O B I Q D F F R F X R P S I R Q L
)HGHUDO 5HVHUYH %DQN RI 0LQQHDSRHSRUVW5HVHDUFH
0DUFK

+DOO 5 (37KH +LJK 6HQVLW W Y R L W L Q F I Q F E R Q R
)ULFWLRQV' 6WDQIRUG 8QLYHUVLW\ PLPHR

H 2SHQ HFRQRP\

*HUWOHU 0 6 *LOFKULVW) 1D W D L O X V F L R Q 0 R Q H (V W
3ROLF\ DQG WKH)LQDQFLDO \$FFHOD D I Q G V % D U N L Q X U Q D O
SS

&HVSHGHV / 3 5 &KDQJ DQG \$ 9H D Q G F R F K D Q J H % J D O V
3ROLF\ \$PHULFDQ (FRQRPLF 5HYLHZ SS

(OHNGDJ 6 -XVWLQLDQR \$ DQG W F K G N O P D R O Y O 2 S H Q
(FRQRP\ ORGHO RI WKH)LQDQFLDO \$ F O H I D H Y H D W R U L ' O Q D O
-RXUQDOV

\$JKLRQ 3 %DFFKHWWD 3 DQG \$ 9 L W % D Q B Q H H R Q H W D
3ROLF\ LQ DQ (FRQRP\ ZLWK &UHGLW \$ R Q M W Z J D L Q S / ')

,DFRYLHOOR 0 DQG 5 0LQHWL FOHV³, ZLWKU Q R P W L V R A Q
DQG)RUHLJQ /HQGHUV' -RXUQDO RI 0RQHWDU\ (FRQRP

0HQGRJD (* 6XGGHQ 6WRSWD)JLQ D Q P H L D O F D Q L V H
(FRQRPLF 5HYLHZ ±

3HUUL) 9 4XDGULQL ³,QWHUQDWLRQDO 5HFHV
KWWS ZZZ ISHUUL QHW 3\$3(56 LUHFHVLRQVBODWHVW

&UHGLW)ULFWLRQV DQG ,QYHVWPHQW 0LFUR (YLGHQF

D (DUO\ &ULWLFDO 5HYLHZV

6FKLDQW DUHOOL) ³)LQDQFLDO 0 H W K R G R O R J Q W
,VXHV DQG ,QWHUQDWLRQDO (YLGHQF\ 2 [0 R U G 5 H Y L
1R SS , V O % D Q Q / H Q G L Q J , P S R U W D Q W I R
0RQHWDU\ 3 H R G L W H G E \ - 3 H H N D Q G (6 5 R V H Q J U H Q)
%RVWRQ &RQIHUHQFH 6HULHV 1R -XQH

.DSODQ 6 1 DQG / =LQJDOHV VL³WQYHWWPHQSWH&D
9DOLG 0HDVXUHV RI)LQDQFLQJ &RQ~~RR~~W~~DL~~QW~~W~~'D\4XSDU

\$OPHLGD + DQG 0 &DPSHOOR W³)LQDQFLQJ &RQ~~RR~~W~~DL~~QW~~W~~'D\4XSDU
&RUSRUDWH ,QYHVWPHQW' L³WQYHWWPHQSWH&D

%RQG 6 DQG - * &XPPLQV ³1RLWRGKIDURI3ULF
,QYHVWPHQW' ,)6 :RUNLQJ 3DSHUXGLHV ,QVWLWXWH I

&XPPLQV - * . \$ +DVVHWW DQG 6Q'W 2%~~H~~Q~~DL~~VRU
2EVHUYDEOH ([SHFWDWLRQV DQG ,QVWLWXWH)XQSSV' :

OR\HQ 1 ³,QYHVWPHQW &DVK QHRGZ Y6HUCWLWLY
8QFRQVWUDLQH)LUPV' -RXUQDO RI)LQDQFH SS

\$OPHLGD + DQG 0 &DPSLHOOR DQG OD~~V~~K :H~~R~~ZIQEDF
6HQVLWLYLW\ RI &DVK' 7KH -RXUQDO RI)LQDQFH /,;

(ULFNVRQ 7 DQG 7 0 :KLWHG H³05HDDXWHRQVQLS
EHWZHHQ ,QYHVWPHQW DQG 4' -RXUQDO RI 3ROLWLFDO

*RPHV -) ³)LQDQFLQJ ,QYHVWPHQW'WHZ \$PHUL
'HFHPEHU SS

&RRSHU 5 DQG - (MDUTXH YH³WQYHWWPHQSWH&D
LQ 4' 5HYLHZ RI (FRQRPLF '\QDPLFV SS

\$GGD - DQG 5 &RRSHU ³'\QDPLFSSORFDDVLRQW'
0,7 3UHV 2FWREHU FK

:KLWHG 7 0 ³([WHUQDO)LQDQFLQJ &RQ~~RR~~W~~DL~~QW~~W~~'D\4XSDU
RI ,QYHVWPHQW' -RXUQDO RI)LQDQFLDO (FRQRPLFV

:KLWHG 7 0 DQG * - :X ³)LQDQFLQJ &RQ~~RR~~W~~DL~~QW~~W~~'D\4XSDU
6WXGLHV

& +HQQHV\ \$ /HYL DQG 7 0 :KLWHG ³7HVWLQJ

1LNRORY % / 6FKPLGW 5 6WHUL QVWUDLQWVPLKLE
)ULFWLRQV 0DWWHU IRU &RUSRUDWH 3ROLFLHV" PLPH
KWWSV LGHDV UHSF RUJ S UHG VHG KWPO

H &UHGLW)ULFWLRQV DQG 3ULFH 6HWWLQJ

%LOV 0DUN 3ULFLQJ LQ D &XVWRPHU QDODRNHW
(FRQRPLFV 0,7 3UHVY YRO SDJHV 1RYHPE

*RWWIULHV 1LOV &XVWRPHU 6DULRQWVDQJHGDV
3ULFH 5LJLGLW\ (FRQRPLFD /RQGRQL 6DORFQHQF(HRQ
SDJHV \$XJXVW

&KHYDOLHU -XGLWK \$ 6FKDUIVWHHW, PSMUGHFWLRQV&
&RXQWHUF\FOLFDO 0DUNXSV 7KHUR\ DFQSHYLIHGHZHQFH
\$PHULFDQ (FRQRPLF \$VVRFLDWLRQ EYRU SDJHV

\$QQD %RWWDVVR 0DUJLR *DOHRWWL7K \$OHVS/DQVURI 6
)LQDQFLQJ &RQVWUDLQWV 2Q 0DUNXSV 7KHUR\H\$QGH (Y
'DWD &(5,6 :RUNLQJ 3DSHU , QWFKL RQ WIHU PRUD (E B
*URZWK 0RQFDOLHUL 72

%XFKW &KDUORWWH *RWWIULHV 1LQW /XULFLHQ)DDQ
LQ D 5HFHVLRQ")LQDQFLDO &RQVWUDLQWVLRQYHV
:RUNLQJ 3DSHU 6HULHV 8SSVDFRQRPILYUVLW\ 'H

0DUYLQ - %DUWK ,,, 9DOHULH \$ 5DRH\ORQHWDUKH &
7UDQVPLVLRQ 1%(5 &KDSWHUV LQ 1%(5RDXPHRHFRC
SDJHV 1DWLRQDO %XUHDX RI (FRQRPLF 5HVHD

5DYHQQD)HGHULFR :DOVK &DUO (F\ ZLWK2SWKHP B B V
FKDQQHO -RXUQDO RI 0RQHWDU\ (5RQRPLFV (OVHY
0DUFK

-DH 6LP 5DSKDHO 6FKRHQOH (JRQ =DNUQMOVHMLRQLP
'\QDPLFV 'XULQJ WKH)LQDQFLDO &ULVLRFLHW\ 0RHWI
(FRQRPLF '\QDPLFV

I 1HZ 0LFUR DQG 0DFUR (YLGHQFH RQ WKZIL&H0GLW D
LQWHUSUHWHG PRVWO\ EXW QRWURIQQA 'HUEVP &WKML)
3HULRG

i) US

%HFNHU % DQG 9 ,YDVKLQD \ 3&LFUPLFDHOLHWA R
H YLGHQFH' -RXUQDO RI 0RQHWDUDJ(HFRQRPLFV (OVHYL

.DKOH . DQG 5 6WXO] 3\$FIDQGVWRHFDQDWBDDQ
,PSDLUHG FUHGLW FKDQQHO RU GLRLQIV3CHGHPDQG
'LFH &HQWHU IRU 5HVHDFK LQ)LQDRQF% 0LQFRVVRPZLKH
2KLR 6WDWH 8QLYHUVLW\)HEUXDU\

\$GULDQ 7 &ROOD 3 DQG + 6 6KLFQVLRQV" 3KDLFVLQJQ
(YLGHQFH IURP WKH)LQDQFLDO &ULVLHUVR 1%
1DWLRQDO %XUHDX RI (FRQRPLF 5HVHDFK ,QF

*LOFKULVW 6 9 <DQNRZ (=DNKURMMNDQG (FRQRPHG
)OXFXDWLRQV (YLGHQFH IURP &RUSRUDWH 3%RQGV

.DVK\DS \$ DQG / =LQJDOHV 77K/HVVRQV)LQDQF
&RUSRUDWH)LQDQFH' -RXUQDO RI6)LSWDHPEHU (\$QRP

,YDVKLQD 9 DQG ' 6FKDUIVWHLWKH ILQDQFQNOOFHQG
' -RXUQDO RI)LQDQFLDO (FRQRPHV (OVHYLHU
6HSWHPEHU

'XFKLQ 5 2 2JEDV DQG % \$ 02pÀ')OXFWXE-ÁÉpG \$Àp€

ROX,,°P)LQDT `À@ð0(FRQRP

ii) *Europe*

\$OEHUDJ]L 8 DQG ' - 0DUFKHWW WR 4X³&D]HGLWQ

6FKLYDUGL) (6HWWH * 7DEB00RQL'XULQJ W&UHGVLV

)RUEHV . 3+RZ 'R /DUJH 'HSUHFJLPDQVLFHQV , \$)IH FV
6WDII 3DSHUV SS

'HVDL 0))ROH\ DQG .)RUEHV V DQG) L*QBQWIKDO
0XOWLQDWLRQDO DQG /RFDO)LUPV 5HZ/SRIQVLQ DQFF L&XU
6WXGLHV SS

.DOHOPL 2JFDQ 6 .DPLO + & 9LOOHUJQGHUQFKH
,QYHVWPHQW LQ WKH \$IWHUPDWK ROL)LPDQVFKHO/ &UULV
\$FFHVV WR)LQDQFH' PLPHR 1%(5

0DQRYD . 6 - :HL = =KDQJ D)VLURPQ Q)S\$FWWL YLQ
XQGHU &UHGLW &RQVWUDLQWV' 1%(5 :RUNLQJ 3DSHU

0LQHWWL 5 DQG 6 & =KX 3&UH(SRW W&RQVWU
0LFURHFRQRPLF (YLGHQFH IURP ,WQR'PL-RXUQDO SS ,Q

\$PLWL 0 DQG 'pÅ'pÅ° ! 0 DQG@A5HDQ•AÀ 0`°0 Pp`

*UHHQZRRG - DQG % -RYDQRYLF 3)LQDQFWLH 'HYH
'LVWULEXWLRQ RI ,QFRPH' -RXUQDO R\$S3ROLWLFDO (FR

/HYLQH 5 36WRFN 0DUNHWV QDROZVRK)DQGQ7FH
6HSWHPEHU SS

.LQJ 5 DQG 5 /HYLQH D 3)LQ*URZWK(Q7KHRSUHQHG
(YLGHQFH' -RXUQDO RI 0RQHWDU\ (FRQRPLFV 'HFHPEH

6DLQW 3DXO * 37HFKQRORJLFDQG&KRBRPDEQD
'HYHORS~~PH~~QW' (XURSHDQ (FRQRPLF 5HYLHZ SS

\$JKLRQ 3 DQG 3(QRZUMQVXV *URZWK 3KHVRV\FK

\$JKLRQ 3 0 'HZDWULSRQW DQG 3DQFLDO 'LVF&LSPSLH
DQG *URZWK' 5HYLHZ RI (FRQRPLF 6WXGLHV

\$FHPRJORX ' DQG) =LOLERWWL E\ &K:DDVF3HUR5PLWVKH
'LYHUVLILFDWLRQ DQG *URZWK' -R\$UQDO RI 3ROLWLFDO

'H OD)XHQWH \$ DQG - 0 0DULQ WRUEQQQDQDWL
(QGRJHQRXV)LQDQFLDO 'HYHORS~~PH~~QW' -R\$S3QDO RI 0

0RUDOHV 0) 3)LQDQFLDO ,QWRZWKGLDWRXJK L
&UHDWLYH 'LVWUXFWLRQ' 0DFURHFRQRPLF '\QDPLFV

\$JKLRQ 3 * 0 \$QJKHOHWRV \$ %DQDWHHLW\ DQGF
*URZWK &UHGLW &RQVWUDLQWV DQGXWKDIO&RPSRQHWWIDF
(FRQRPLFV SS

*UHHQZRRG - - 6DQFKHJ DQG & RDSQJHQW W3)H Q5DQDF
RI ,QIRUPDWLRQ &RVWV 1%(5 :RUNLQJH3DSDQ
(FRQRPLF 5HYLHZ

0LFKDORSRXORV 6 / /DHYHQ DQG, Q5R/YDWRQRIQ DQG
(QGRJHQRXV *URZWK' PLPHR %URZQ 8QLYHUVLV\

%LDQFKL) + .XQJ DQG * 0RUDOHVQ 5HFYWRZWK'V
1%(5 : 3

(DVWHUO\ : ,VODP 5 DQG 6WJLQJLW]G - ([SODLQ6LQDNH
*URZWK 9RODWLQW\ \$QQXDO %DQNP&RQIHRUHQGFH RQ '
%DQN :DVKLQJWRQ ' &

%HFN 7 %X\XNNRWDDED)FDNQ% 9D5QHKYR JHWV WKH FUHG
DQG GRHV LW PDWWHU" KRXVHKROG3R0LFL5PHVHDDUGFLQJ
:RUNLQJ 3DSHU 6HULHV 7KH :RUOG %DQN

'HPHWULDGHV 3 2 DQG /DZXWFRQV DQG)HQRQRPLFLC
'HYHORS~~PHQW~~' ,QWHUQDWLRQDO -RXUQDO RI)LQDQFH

E ,QG~~XVWU~~\ DQG)LUP /HYHO (YLGHQFH

5DMDQ 5 * DQG =LQJDOHV / G *)LRQZQK'LDO '
\$PHULFDQ (FRQRPLF 5HYLHZ -XQH

'HPLUJXF .XQW DQG 9 0DNVLP~~RYLF~~ *URZWK')LQDQ

&HWRUHOOL 1 DQG 0 *DPEHUD)L³%DQNLQJ 0
'HSHQGHQFH DQG *URZWK ,QWHUQDDWZIRQDIX(YQGEGRFH
)LQDQFH YRO SS

/HYLQH 5 ³%DQN %DVHG RUHOPUN:HKWF%DLVHG)
%HWWHU' -RXUQDO RI)LQDQFLDO ,QWHUPHGLDWLRQ 'V

'HPLUJXF .XQW DQG 5 /HYLQH ³%DQND%DLVHG R
6\VWHPV &URVV FRXQWU)LQDQFLDO V6RQVXFWLXUH DQG
*URZWK \$ &URVV &RXQWU\ &RPSDULVRQRIP%QNV 0D
(GV \$VOL 'HPLUJXF .XQW DQG 5RVV /HYLQH &DPEULGJ

%HFN 7 DQG 5 /HYLQH ³6WRFN 0DUNH(WLVGH%QNV
-RXUQDO RI %DQNLQJ DQG)LQDQFH

%HFN 7 DQG 5 /HYLQH ³1HZ)LUP)RUPDWLRQ D

I)LQDQFLDO 'HYHORSPHQW DQG &RQYHUJHQFH

\$JKLRQ 3 3 +RZLWW DQG ' 0D\HURR)00BQFLDO
'HYHORSPHQW RQ &RQYHUJHQFH 7KHRUQDQGRI(YLGH
(FRQRPLFV SS

\$JKLRQ 3 3,0FWWU DQWL RQ ZHQDWRQZWKLS QEGW
)LQDQFH' &DSLWDOLVP DQG 6RFLHW\

J)LQDQFLDO /LEHUDOLJDWLRQ)LQDQFLDO05HMRNORSPH
\$OORFDWLRQ

:XUJOHU - 3)LQDQFLDO 0DUNSLWMDQGRXKQDQD
)LQDQFLDO (FRQRPLFV SS

*DOLQGR \$) 6FKLDQW DUHOOL DQDQ /LEHUDOLJDWL
,PSURYH WKH DOORFDWLRQ RI ,QYHRSLPCHQWRXQWURHW
DUNHWEP° rQ`0P€p G-)

%HNDHUW * & 5 +DUYH\ DQG & /XQGEEDDGDOLJDWL'R
6SXU *URZWK"´ -RXUQDO RI)LQDQFLDO (FRQRPLFV YR

%HNDHUW * & 5 +DUYH\ DQG & /XQGEEDDGD)LQDQFLD
/LEHUDOLJDWL'RQ´ -RXUQDO RI ,QWHUQDWLRQDO ORQH

+HQU\ 3 % 3'R 6WRFN 0DUNHWWPBBWDORJDPWL'RQ
-RXUQDO RI)LQDQFLDO (FRQRPLFV 2FWREHU 9RO

+HQU\ 3 3&DSLWDO DFFRXQW HQLEHUDDQGDWL
6SHFXODWL'RQ´ -RXUQDO RI (FRQRPLF /LWHUDWXUH

/HYFKHQNR \$\$ 5 5DQFLHUH 0 7KRNHQWJWKH ,QGRV
/HYHO 7KH 5HDO HIIHFWR RI)LQDQFLDOLHOLHSHUHQWJD
(FRQRPLFV SS

'HOO \$ULFFLD * ' ,JDQ DQG / /DHYHQ/HQGLQJ&UH
6WDQGDUGV (YLGHQFH IURP WKH 6XPHSRULPH 0RUWJDJH

5DQFLHUH 5 7RUQHOO \$ DQG) :HWWKHURIDQWV RI
)LQDQFLDO /LEHUDOLJDWL'RQ *URZWK DQD &LQDQFLD

3RSRY \$ 3&UHGLW FRQVWUDLQWV 3(QeÑ] @ 5H 5

\$QJNLQDQG \$ 3 : 6DZDQJQJRHQ\DQJ)LODQFLDO:LK
/LEHUDOLJDWLRQ DQG %DQNLQJ &UQWLVUQ\$WUHQDO&BNO
RI)LQDQFH SS

%DUWK - * &DSULR -U 5 /HYLQH6XSHUY1%DRQ 5:HKDW
:RUNV %HVW" -RXUQDO RI)LQDQFLDO ,QWHUPHGLDWL

%HQIUDWHOOR /) 6FKLDQWDUHO DQG\$, QGHPYEDHQLHROO
(YLGHQFH RQ ,WDOLDQ)LUPV' -RXUQD RYRIP EHQD QFS D C

%ODFN 6 DQG 3 6WUDKDKQ ³(GLWU \$ \$ D H Q D H X I U / K W
-RXUQDO RI)LQDQFH

.HUU : DQG 5 1DQGD ³HPRFUDHWX D D W L R Q W U \
)LQDQFLQJ &RQVWUDLQWV DQG (QWLWDS UFRQ R X P L V K L S
IRUWKFRPLQJ

%HFN 7 /HYLð0

& (&2120(75,& 722/6)25 '<1\$0,& 3\$1(/6

\$UHOODQR 0 DQG 6 5 %RQG 3RUP B D Q H M O W G D R W D
0RQWHF DUOR (YLGHQFH DQG DSSOLF D W L R Q Z W R I (P S C
(FRQRPLF 6WXGLHV

\$UHOODQR 0 DQG 2 %RYHU 3\$ Q P W D K U I U D F E R O
(VWLPDWLRQ RI (UURU &RPSRQH Q W, 0RGHOV' -RXUQDO

\$UHOODQR 0 DQG % +RQRUH 33 D Q W O 'D W D
'HYHORS PH Q W V' LQ -- +HFNP D Q Q D C E R R N R / H D P R H O R P H G W U
YRO 1RUWK +ROODQG

%RQG 6 5 3'\QDPLF 3DQHO GDWD W O R P H H O W K R S G V X I
DQG 3UDFWLFH' &(00\$3 :RUNLQJ SDSHU &:
KWWS FHPPDS LIV RUJ XN GRFV FZS SGI

%OXQGHOO 5 : DQG 6 5 %RQG H Q , Q L S M L D W O I & F R V Q L G R L O
'\QDPLF 3DQHO 'DWD 0RGHOV,' -RXUQDO RI (FRQRPHWU