

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

)DOO
0DORQH\ +DOO 7 7+

3URI)DELR 6FKLDQWDUHOOL
5RRP 0DORQH\ +DOO
7HO

(0\$, / VFKLDQWD#EF HGX
2IILFH KRXUV 7 7K DP

6\OODEXV DQG 5HDGLQJ /LVW
\$XJXVW

&RQWHQW , Q WKLV FRXUVH , ZLOO DDOO OADHU NHKH ILQSVHUU
LQYHVWPHQW EXVLQHVV F\FOH IOXLFQXDRXL ZQWKDQG GT XUV
H[WHQVLYH UHGGLQJ OLVW VR WRBWH\RXH\$VQ H[SRORWHO
VXE WRSLFV ZLOO EH FRYHUHG LQ XGZHWDLQ EHG XIQFORX WVKH
LQYHVWLJDWH VRPH RI WKH LVVXHG RQASXUH RZLOO OZGWVF
ERWK WKHRUHWLFDQ DQG HPSLUQEQO EFRQVUDFXURLBQG
HYLGHQFH 7KH FRXUVH ZLOO DOVRILQGFDOXGHH DVLFRDWRILRQ
DQ HPSLULFDQ H[HUFLVH VHH HQG RI UHGGLQJ OLVW

/HFWXUH QRWHV \$ VHW RI OHFWXURXQBWHQ &RQWDXH PD
P\ JRRJOH SHUVRQDO ZHEVLWH
KWWSV VLWHV JRRJOH FRP D EF JUDXGKDEWIR VFKLDQWDU

\$VVLJQPHQWV DQG *UDGLQJ 6WXGKQWH ZHOUEH UH\$RU
GLVWLQFW WRSLFV XVLQJ YHU\ UKDFHQWRS DISYHU D @QDMV
SUHVHQWDWLRQ)LQDOO\ WKH\ ZEDWLRQ H[SHUFWMG XWLQ
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 WKHP6HWDUWH 3UHI
,QIRUPDWLRQ DQG ,QFRPSOHWH &RQUDFWV

D 7KH 0RGLJOLDQL 0LOOHU 7KHRUHP6DQG FVKXUHUHOHYD

ORGLJOLDQL) DQG 0 0LOOHU UD³WKRQ&RVDQRFH&DS
WKH 7KRU\ RI QYHVWPHQW \$PHULFDQ (FRQRPLF 5HY

&K LQ 6DUJDFQVWHFRQRPLVH7FRQRGJHGLWLRQ
E)LUPV1)LQDQFLDO 6WUXFWXUH XQQRPS\$VWPP&VQWFDQFM
:DOVK 0RQHWDU\ 7KHUR\ 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 ,QIRUPDWLRQRXUKDDO ,RIYH
)LQDQFLDO (FRQRPLFV -XQH SS
6WLJOLW] - DQG \$:HLVV 3&ZLHWGLWPSBWIHFRWL
,QIRUPDWLRQ' \$PHULFDQ (FRQRPLF 5HYLHZ -XQH SS
%HVWHU + 36FUHHQLQJ 9HUVXV 5DWLRQLQJ LQ

\$Q ,QWURGXFWRQ WR ,QWHUPHGLDWLRQ DQG %DQNLQJ

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

'LDPRQG ' 3%DQNV DQG /LTXISRLWWRBQDRLWLWQF
'LDPRQG '\EYLJ 0RGHO' (FRQRPLF 4XDRLWHLFQPR)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 8QLYSSJVLW\ RI 0LQQHV

'LDPRQG ')LQDQFLDO ,QWHUFRGLLQWL R Q H Y Q I S Z '
RI (FRQRPLF 6WXGLHV -XO\ SS

'LDPRQG ' 3)LQDQFLDO ,QWHUFRGLLQWL R Q H Y Q I S Z '
(FRQRPLF 4XDUWHUQH %HQHURD 55LHFKHFRXQPHURSS

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

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

5DMDQ 5 3,QVLGHUV DQG 2XWHLGWHURV7KLS 8DQF
\$UPV /HQQWK 'HEW' -RXUQDO RI)LQDQFH SS

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

%HUJHU \$ / .ODSSHU * 8GHOO DLQQLW\ *RHH%DLQNVV
/HQQ WR ,QIRUPDWLRQDOO\ 2SDTXH LQPDQDQG%XLVLDQHFV
9RO SS

&DSLWDO 0DUNHW ,PSHUIHFWLRQV ,QYHWWXDPWHLQVQV DQ G
0RGHOV DQG \$JJUHJDWH ,PSOLFDFWLRQV

D)LQDQFLDO)ULFWLRQV DQG WKH)LQDQFLDRLDQ \$FFPHOHU
°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 ,PSHUIHFWLRQV' 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&QW
&RQGLWLRQV (YLGHQFH IURP WKH &R³SRVLWLDQ RI
(FRQRPLF 5HYLHZ QR 0DUFK SS

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

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

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

3HHN - DQG (5RVHQJUHQ 37KH ,QWHUQDWLRQ

.DVK\DS \$. 2 \$ /DPRQW DQG - &GL6WHLRQV DQG W&K
&\FOLFDO %HKDYLRUXDIU, QYUQW-RUXIUM O R1 (F \$ QJPLW
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 & 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 (W W
3ROLF\ DQG WKH)LQDQFLDO \$FFHODUHQW%DUQNLQXUQDO
SS

&HVSHGHV / 3 5 &KDQJ DQG \$ 9H D Q Q 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 O D H Y H D W R U L ' O Q D
-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 D L Q S / '

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

0HQGRJD (* 6XGGHQ 6WRSWD)JLQ D Q P H L D L 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 H & K R G R O R J Q W
,VXHV DQG ,QWHUQDWLRQDO (YLGHQF\2[PRUG 5HYL
1R SS , V O % D Q Q / H Q G L Q J , P S R U W D Q W I R
0RQHWDU\ 3H R G L W H G E \ - 3H 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)~~LQDQFLDOL~~W&RQ~~W~~
&RUSRUDWH ,QYH~~W~~PH~~Q~~W'F~~L~~5~~H~~Y~~1~~6HWXGLHV SS

%RQG 6 DQG - * &XPPLQV ³1RLWR~~6~~K~~D~~URI3ULF
,QYHVWPHQW' ,)6 :RUNLQJ 3DSHUXGLHV ,QVWLWXWH I

&XPPLQV - * . \$ +DVVHWW DQG 6Q'W 2%~~H~~K~~D~~VLRU
2EVHUYDEOH ([SHFWDWLRQV DQG ,Q~~W~~H~~Y~~UL~~Q~~D~~Z~~O)XQ~~S~~V' :

OR\HQ 1 ³,QYHVWPHQW &DVK ~~Q~~H~~G~~Z Y6H~~U~~Q~~W~~L~~W~~L~~Y~~
8QFRQVWUDLQH~~G~~)LUPV' -RXUQDO RI)LQDQFH SS

\$OPHLGD + DQG 0 &DPSLHOOR DQG OD~~V~~K :~~H~~O~~R~~Z~~I~~Q~~E~~D~~F~~
6HQVLWL~~Y~~L~~W~~\ RI &DVK' 7KH -RXUQDO RI)LQDQFH /,;

(ULFNVRQ 7 DQG 7 0 :KLWHG H³05~~H~~D~~V~~X~~W~~H~~R~~Q~~V~~K~~L~~S
EHWZHHQ ,QYHV~~W~~PH~~Q~~W DQG 4' -RX~~W~~Q~~S~~S RI 3ROLWLFDC

*RPHV -) ³)LQDQFLQJ ,QYHVWPH~~Q~~W~~H~~Z \$PHUL
'HFHPEHU SS

&RRSHU 5 DQG - (MDUTXH YH³)~~W~~Q~~D~~Q~~W~~L~~D~~\$ 5~~H~~I~~K~~W~~H~~
LQ 4' 5HYLHZ RI (FRQRPLF '\QDPLFV SS

\$GGD - DQG 5 &RRSHU ³'\QDPL~~S~~S~~O~~R~~F~~D~~V~~L~~R~~Q~~W~~'
0,7 3UHV 2FWREHU FK

:KLWHG 7 0 ³([WHUQDO)LQD~~Q~~H~~V~~L~~Q~~H~~P~~S~~R~~Q~~V~~U~~3~~D~~L~~Q~~W~~
RI ,QYHV~~W~~PH~~Q~~W' -RXUQDO RI)LQDQFLDO (FRQRPLFV

:KLWHG 7 0 DQG * - :X ³)LQ~~D~~H~~Y~~L~~H~~Z~~J~~R&R)Q~~Q~~W~~Q~~D~~L~~Q
6WXGLHV

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

1LNRORY % / 6FKPLGW 5 6WHUL QVWUDB QWVPL:KLE
)ULFWLRQV 0DWWHU IRU &RUSRUDWH 3ROLFLHV" PLPHI
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 6DULRQWVDQG 5GIDV
3ULFH 5LJLGLW\ (FRQRPLFD /RQGRQL 6DORFQ HQF(HRQ
SDJHV \$XJXVW

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

\$QQD %RWWDVVR 0DUJLR *DOHRWWL7K \$OHVS/DQVURI 6
)LQDQFLQJ &RQVWUDLQWV 2Q 0DUNXSV 7KHRU\ DFQSHYLIHGZHQFH (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 &RQVWUDLQWV 2Q 0DUNXSV 7KHRU\ DFQSHYLIHGZHQFH (Y
:RUNLQJ 3DSHU 6HULHV 8SSVDFQSHYLIHGZHQFH 'H

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

5DYHQD)HGULFR :DOVK &DUO (F\ ZLWK 2SWKHP B B V
FKDQQHO -RXUQDO RI 0RQHWDU\ (5RQRPLFV (OVHY
0DUFK

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

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

i) US

%HFNHU % DQG 9 ,YDVKLQD \ 3 & LFUPL FCHYLHO R
HYLGHQFH' -RXUQDO RI 0RQHWDUDJ (FRQRPLFV (OVHYL

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

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

*LOFKULVW 6 9 <DQNRZ (=DNKURMMNDQG (FRQRPLF
)OXFXDWLRQV (YLGHQFH IURP & RUSRU DSWH 3% RQGV

.DVK\DS \$ DQG / =LQJDOHV 77K/HVVRQV)LQBF
&RUSRU DWH)LQDQFH' -RXUQDO RI 6)LSWDHPEHU (\$QRP

,YDVKLQD 9 DQG ' 6FKDUIVWHLWKH ILQD%DFQNOOFILQ
' -RXUQDO RI)LQDQFLDO (FRQRPLFV (OVHYLHU
6HSWHPEHU

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

ROX,°P)LQDT `À@ð0 (FRQRP

ii) *Europe*

\$OEHUDJ]L 8 DQG ' - ODUFKHWW WR 4X³&DHLGLWQ

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

)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/SRIQ V LQ DQFF L&XQ
6WXGLHV SS

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

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

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

*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
'HYHORSHPHQW' (XURSHDQ (FRQRPLF 5HYLHZ SS

\$JKLRQ 3 DQG 3(QRZUMQRXV *URZWK 3KHVRW\FK

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

\$FHPRJORX ' DQG) =LOLERWWL E\ &K:DDQF3HUR5PLWVKH
'LYHUVLILFDWLRQ DQG *URZWK' -R\$UQDO RI 3ROLWLFDO

'H OD)XHQWH \$ DQG - 0 0DULQ WRUEQQQDQDWL
(QGRJHQRXV)LQDQFLDO 'HYHORSHPHQW' -R\$UQDO RI 0

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

\$JKLRQ 3 * 0 \$QJKHOHWRV \$ %DQDMDWHHLW\ 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/YDWWQRQ DQG
(QGRJHQRXV *URZWK' PLPHR %URZQ 8QLYHUVLW\

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

(DVWHUO\ : ,VODP 5 DQG 6WJLQJLW]G - ([SODLQ6LQDN
*URZWK 9RODWLQW\ \$QQXDO %DQNP&RQIHRUHQGFH RQ '
%DQN :DVKLQJWRQ ' &

%HFN 7 %X\XNNR(WDE)FDNQ% 9D50HKYR 1HWV WKH FUHG
DQG GRHV LW PDWWHU" KRXVHKROG3R0LFL5PHVHDDUGFLQJ
:RUNLQJ 3DSHU 6HULHV 7KH :RUOG %DQN

'HPHWULDGHV 3 2 DQG /DZ XWFRQV DQG)HQRQRPLFC
'HYHORS~~PHQW~~' ,QWHUQDWLRQDO -RXUQDO RI)LQDQFH

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

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

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

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

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

'HPLUJXF .XQW DQG 5 /HYLQH ³%DQND%DLVHG R
6\VWHPV &URVV FRXQWU)LQDQFLDO VROUXFWLXUH 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\HURRX\OQDQFLDO
'HYHORSPHQW RQ &RQYHUJHQFH 7KHRUQDQGR(IYLGH
(FRQRPLFV SS

\$JKLRQ 3 3, QFWVDQWLRO ZHQDWURQWKLSDQHW
)LQDQFH' &DSLWDOLVP DQG 6RFLHW\

J)LQDQFLDO /LEHUDOLJDWLRO)LQDQFLDO O5HMKNORSPH
\$OORFDWLRO

:XUJOHU - 3)LQDQFLDO 0DUNSLWDDQG-RXKHQDQO
)LQDQFLDO (FRQRPLFV SS

*DOLQGR \$) 6FKLDQWDUHOOL DQDQ /LEHUDOLJDWLRO
,PSURYH WKH DOORFDWLRO RI ,QYHRSLFQWRXQWURHW
DUNHWEP° rQ`0P€p G-)

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

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

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

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

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

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

5DQFLHUH 5 7RUQHOO \$ DQG) :HWWKHURIDQWV RI
)LQDQFLDO /LEHUDOLJDWLRQ *URZWK DQDQ &LQDQFH -

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 ³'HPRFUDHWX D L Q 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 W O W G D R W D
0RQWHF DUOR (YLGHQFH DQG DSSOLF D W Y R Z W R I (P S C
(FRQRPLF 6WXGLHV

\$UHOODQR 0 DQG 2 %RYHU 3\$ Q P W D K W 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 PHQWV' 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 W 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 W I & F R W Q L G R L O W
'\QDPLF 3DQHO 'DWD 0RGHOV,' -RXUQDO RI (FRQRPHWU