

# HYadUWcZxAc fda JyUfUVYgcbj Ui Y UXXIU WadJUBW/b'Gci h '5ZJW'

5BW/b'GWYaUb'

\$E V W U D F W

FyGUWJhc hYjadUWcZxAc fda JyUfUVYgcbj JbW'Xh' [YxZUyZzfa U'YxW]cbU'XIU' hck'Y'Y'Eb'RI'  
WadJUBW \Ug'dicXWkaJl YXfg'lg' Hlg'UfUV f'icf'g'cb'Ub'cb]b'V'k'Y'Y'g'V'W'g'Y'df'a'Y'h'W'b'V'X'k'h'  
Jb'j'X'U'g'd'k'h' #a'U'j'j'g'a'U'V'g'b'g'g'g'X'W'a'J'b'h'Y'adUWcZ'g'W'j'U'f'U'V'Y'g'cb'U' WadJUBW'X'j'j'c'f'j'G'c'h'  
5Z'J'W'g'J'W'nk' \Y'h'Y'U'Y'W'U'j'Y'g'b'h'Y'J'5'H'U'Y'

HYgix'z'g'h'U'V'Z'f'Y'h'Y'U'Y'W'U'j'Y'g'b'h'Y'J'5'H'U'Z' [YxZUyZzfa U'YxW]cbU'XIU' hck'Y'Y' \j'Y'U'b'Y'W'cb'RI'  
WadJUBW'X'W'g'd'g' G'nk'U'ic'Z'W'H'g'g'k' \Y'h'Y'Y'g'U'W'U'Y'j'b'h'Y'J'5'H'U'Y'g'g'J'W'U'm'b'J'W'g'Z'h'Y'd'm'  
X'ac'f'd'a'J'y'U'f'U'V'Y'h'U'g'Z'i'b'k' \j'Y'U'j'j'Z'W'U'z'a'j'g'U'g'U'X'g'U'W'g'c'h'Y'adUW'X'j'ad'U'W'g'c'Z'x'ac'f'd'a'J'y'U'f'U'V'Y'g'cb'U'

W'U'g'g'U'j'j'

.H\ZR U'X'ac'f'd'a'J'y'U'f'U'V'Y'g'cb'U' WadJUBW'g'a'U'V'g'b'g'd'k'b'g'a'U'j'Y'g'J'5'H'U'Z'Y'd'f'a'Y'h'

Yd fBU'zHI FyGAW

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HYjadUWZSdq fda MYUfU'gdj UI YOSSXNI WadJUBWbGih'5ZfW

,1752'8&7,21

iiHUYgfyhY'ZVccXcZ'cj Mha YHbXhcM dmf'gci'XYdMa JHX  
lc YgUMhYdina YhcZ'g'ig'g'UfYcZHYM'XbcZWHQMIH hNYlc'D  
f5hifJUBXV'bz>La Yg&9'E"

JUI YOSSXNI 'E'5H'gcbYcZHYa QbRI'fy Yi YgSLag' cUmbXgUdJYX

Yd fBUcZHI FgUW

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HYjadUEZSdq fA MYUfUvGdj UI YOSSXNI Wad jUBWbGih '5ZjW

fN |gUhdg' G5FCg Vg6 Yhm jNWXhUHYYkci 'XWU6 jBMlgXZAlgd  
J5Hj bhYga U VjgbggNWfUXhUUUf Yd fUjcb'Zga U Vjgbggj b | YMU

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YdibUcZHI FgUW  
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HYjadUEZSdq fA MYUfUgdj U YOSSNI WadJbWbGih'5ZjW

\$ J H

-b[ YbUZhYgXygd]hij XUN dmfWadJUBWU i YhUcXfU dmfGfX  
 le Wadna cYhUbh Yfmi h YWbPfdUg fUg JW/ Gi GJ Z% S' < UqYXbZ  
 ? UfU/ : i ~ YZ% (E'HYmi h UY Ygg ddfij YcZhYdc fYgij YU 'ggA'  
 hUb hYcXU XhYUfXg cZhYmi h 'UfUg' acfYUWd h 'lckUg' hcl  
 WadJUBWbUfYhYUfXg cZhYcXfU fbn Fidm' KUFFWZS% EDdgjVY  
 fUgZf hlg UYhUhYcX \ j Y[ fUf ZbUW gU] hndggVnUf h 'acfY  
 jWá YhUbhYmi h X Yc Y d fYWH Yn fYUg' acfYXbPfdUg V WocYg  
 Uxgij JYgUfXm Wm Uj YacfY d fYbWk h V g b g U X Y Y i Y U h c f j g  
 U X h Y Z f Y [ U b a c f Y \_ b c k Y Y U c i h U ' U z k \ j W a U n Y U g V W X k h U  
 \ j \ Y Y Y c Z U W a d J U B W h c a U b Y U Z S % E H Y m i h U g g A l e Y Y g g  
 U Z W X v n f Y W a Y g f y g g W U g h Y d c U U j h c Z V h W [ \ h U X d b g Y X  
 f b W Y Z % \* , E'

HY Y U f Z \ c k Y Y Z g X g h U \ j Y Z i b X k c' g U g J W m g j h Z W h W f Y U b'  
 V k Y b' U Y U X R I ' W a d J U B W f r c \ j g A j \ j c b / ' H m % & ! A c f j Y Z h Y  
 j h U U b c Z U Y k h c h Y A U g U X h Y Z W h Y g \ j Y e j Y h Y c h U W a d J U B W  
 g c i X b d W j \ b c f X G d U X M f c i [ \ f % , E z i b X h U h i j X U g V k Y b h Y  
 U Y g c Z ( S U X \* ) \ j Y g d h Y h W j U Y g n U X h U " 5 g U f g i h Y a P X Y  
 U Y X U d m f G f X l e Y a c f Y W a d J U h h U b h Y m i h f b h l g W g z h c g y m i h Y  
 h U b ( S U B X U g ' a c f Y W a d J U h h U b h c g k \ c U f Y c X f h U b \* ) "

HY c X P X l e ' W a c f Y W a d J U h h U b h Y m i h ' f U f j a Y / ' 5 W a z S S S E'  
 < c k Y Y Z U Y X Y g d U k U g V W f Y U k \ j h b g g l e d i n U Z g h c a U M ' c k c X U  
 R I d m f g \ Y g Y k \ ' h c W a d n j \ Y g Y X Y g d h j Y U g h Y c Z f g t h g V j h c'  
 d i n U f k j U h h Y U Z S S S E' "

5 h c i [ \ ' h Y f y g l g U f Y j W b W g j Y h Y a U c f h n c Z g X y g j b X W Y h U c X f  
 R I d m f G f X l e Y a c f Y W a d J U h h U b h c g k \ c U f Y m i h Y'

( G X F D W L R Q

9 X W j b a U n f Y U Y l e l k c X g j b U X g H Y Z f j g Z f a U Y X W j b j b M a g c Z  
 c U h h ' g W b X f i n c f M j f i n e i U j W j c h g g W l g W a d Y h \ \ j \ ' g U c ' c f  
 c U h h ' U i b j Y g j h X Y f Y Z f U X Y g c Z h Y Z Y X j b k \ j W h Y e i U j W j b j g  
 c U h b X H Y g W b X Y U g a c f Y l e h Y g n Y W U ' b c k Y Y U d m f G b d g g g U X  
 f Y Z g l e h Y U j h c i b S g j U X U X h Y l e W a d n i f b d W a d n i k h h Y U ' U g  
 f U W g b / A j \ j c b % , \* E H Y Z f j c Z h Y g W b W l g l e X U k h i b X h l g \ Y h j z  
 i X W j b d k \ j Y h Y g W b X h U ' \_ b c k Y Y l g X U h k h ' l g U g d U Y j U j V Y  
 j a a Y U Y n i Z Y i X W j b d

G i X y g k h f Y Z f W l e Z f a U Y X W j b U e i U j W j c h g j b X W Y h U h U W a d J U B W  
 j a d j Y g k h \ j \ Y Y X W j b z g W j Y b U n U d m f G b k h ' a c f Y Z f a U Y X W j b  
 \ U h Y \_ b c k \ c k l e W a d n i f U X Y g c Z h Y W b P f d U g Z h Y X W j b i h j g S % /  
 G d j / ' M f c i [ \ Z % , E' < c k Y Y Z h Y Y l g U g ' Y j X b W h U d m c d Y k h ' a c f Y  
 Z f a U Y X W j b W j X h j n c o d c Y g U X a U n f A W Y Y g W a d J U h h c a U b Y h  
 U Z S % E H Y \ j \ Y j W a Y U b g f X l e V h Y a c f Y e i U j Y X d m f G U X U g U  
 f g i h Y n f Y U g h Y d c d Y d i j h ' a c f Y U Y g d c f Y g j Y r i c \ j \ j W a Y U b M g  
 a U n i g j j k R I Y U g b a c f Y j c i f U n i A W Y Z S % & !

YdibUcZHI FgUW

HYjadUEZSdq fA MYUfUgdjU YOSSNI WadJbWbGih'5ZUW

: fca`hYdGfNjYcZgiXgXbYcb'gaU`VgbygggWbXfinbXfMfin

Yd fU'zHI FgW

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5'WkYhgVWgcb]bYIdmja YHz`ck] 'UdYNgUkXdg]Ng]Ng]bkUg  
WkXWZ]j c]j] 'Zif kUk Yh] fci d' hUkYYWZd hXk]h 'UJ5HFUY  
WU]YZca hYAfYH%a fUY'

x hcgYk]h Uz] YdMWH]Yd]hXWNg]bhYJ5HFUY%a L.hYU]Y  
XWNg]fci d'

x hcgYk]h UdMdMWH]Yd]hXWNg]bhYJ5HFUY%a L.hYgaU'  
XWNg]fci d'

x hcgYk]h UdMdMWH]Yd]h]WNg]bhYJ5HFUY%a L.hYgaU'  
]WNg]fci d'UX'

x hcgYk]h Uz] YdMWH]Yd]h]WNg]bhYJ5HFUY%a L.hYU]Y  
]WNg]fci d'

HYIdmja YHMa a YWk]h ei Y]dg]c'U]bhYXaq fUd ]WcZ Yg'ZHY  
d]f]M]Hg'UkXhY' V]g]Ng'Y]Ng'UZf k ]W]hYd]f]M]Hg'Yg]d]Xk]e'U  
\mchYU' g]U]f' V]h]W]h] 'hYUaci hg'hYkici 'XWYfY cb'gYg'Uk  
d'fW]g]k]h UJ5HFUYc%a "HYd]f]M]Hg'kYhY'fU]Xa nU'c]W]Xm



hi gXXWYle' dffMUYcf bchUBk'YYUg YXc ZkUXhYa YgJ YWbHh' hY  
'b\_ le'dcdYk\chYhcd[\hkYYei UZjh' dffMUBg'RUibNgYU'Zs%e'

6YkYb>ibYs% UXUi Uin's%z) + FygbgYk'YFWj Yk'h dbrn%Uj UX  
UxigVYZfHYUng'FYgbgYk'YYUj Uxk\YY dffMUBg'XXchJfYle'  
dffMUYbhYgXch/dffMUBg'XXcha YhYei UZjh' hEi Jfa Yb'GUX  
cb'HYJWaa Y'Y' cZHYVigbg' UxVh' 'b'UaUJYa Yb'XWg'cha UJ'  
dghcb'bhYVigbg'fz%hYUth'cbWWg'k'YUbg'YXJWfYw'q' L/hY  
Ydja YikU'ghcg'ZYUth'Wad YXZf'Wad UJ' Yd'fbg'f'f's' UxHY  
dffMUBg'Waa Yb'Vf'm'j'XUXhUih Ym'Xch' b'Ng'UxHY Ydja Yh  
UXhY'ZfY'X'ch'U'g'Y' U'f'c'J'U'Y'm'f'e' HY dffMUBg' k'Y' fUXa' m  
U'c'W'X'v'e'i U'f'V'g'c'h'y'j' U'f'c'g'U'g' Y'h' f'c'g'g' N'c' h' b'HY%

7DEOH \$OORFDWLRQ WR WKH 9DULRXV 7UHDWPHQW \*UR

7UHDWPHQW JURXS

1XPEHU RI UHVSRO

k\YYHYXUUX'bdia YHhYfai Jfa Yhg'cZdMzfa Jf 'chYfng' HYWfNhi  
gixZUgkjh]bhlgWNY diti

HYfYJU]JnicZhYXUfYZgle hYU]JnicZhYgiXole'cUJbifYfij YWbgNhi  
ng'lgk\Y'hYf dfa Yhg'fd]WfXcb'hYga Yg VmW' HY7fcbUWUdU  
jUi Ygk'fYcUJbXle ng'hYfYJU]JnicZhYXUfHYfNBU WbgNhi'Zk'  
gig'cZ@\_MhgUY ei Ygdg'n'X7fcbUWUdUjUi Yg'cZ\$4%'Ux\$4, &  
YVWf' hYhng'XcZ\$' fUf'YU'Z\$%S/hYfng'lg'fYh'YZfYXa X  
fYJUY'

S/ZfYbWg]bngbhgW'XW'Yfha Yk'fYUg'c'VgJ Yle Yg'fYhYfYJU]Jm  
cZhYXUf'HYf dfa Yhikg'cdB'Zca '>ibY\$%'lc'>Ui Ufms%'HYf m  
fngbhgk'fYcUJbXZca '>ibY\$%'lc'5i[i g'is%'UxhY'UYfng'bhg'Zca '  
CWfV \$%'lc'>Ui Ufms%'5''d]f]Mhg\UXle'fYf'fYUaci bh'Yiki X

7DEOH 6XPPDU\ RI 'HPRJUDSKLF 3URILOH

'HPRJUD	SKLFDPSOH	&RPSDUL	&RPSDU URP"	DWLYH 5HSUHVHQWDWLYH"
; YbW	AUY), 1 · : YaUY(& ·	AUY))1 · : YaUY()1 ·	Kcf_ZfW	Mg'
5{Y	· sE). ' s · '*E)S'+1 · )%E). &1 ·  2).)1 ·	OSS 'S(1 · sE (. &'(1 · )E (. (*1 · )SE (. &'1 ·  2 (. (" 1 "	GAA9' ckMg'	Mg'
9NWfcb# eiUfWfdg	I dlc'aUfW1 · DgfaUfW&1 · 6UWfcb((1 · AUYfWScWfWY &1 "	HfWfWfW YfWfcb '&6 · GfWfWfWfW YfWfcb '&1 ·  @yghUfW gWfWfWfWfW YfWfcb)' 1 ·	GAA9' ckMg'	Bc'

Yd fBUcZHI FyUW

HYjadUWZSdq fU MYUfUygdj U YOXXXI Wad]UWjBGi h'5ZUW

: ifhYacfZ Jhg Y]NhhU' ZaUYg NkLc' W acfY Wad]UhhU' aUYg'  
]bj ]XUgVlkYb) %UX\*) in]gtZl] YNkLc W hY Yg Wad]UW hcgY  
) NkLc W hY acf Wad]U h] bj ]XUgk] h hY ckYgi U] W] dg NkLc W  
hY Yg Wad]U h U Xhcg Yk] h' hY Vg J5H\_bk W Y NkLc' W hY acf  
Wad]U h

)LJ &RPSOLDQFH SHU ,WHP SHU 'HPRJUDSKLF 9DULDEO

: [ifYg] Yg Ux [ifY' W fWg] i g] U h Wad]U W d f] N k] b W  
Xad fU MYUfU YU Z h Y W U h Y] b J5H U Y g U N g' h c Z h Y N k L c W h W h  
U h] X' h g y] N h h U L Z h Y N k L c ( H Y U h ' h c a d] U

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Yd fU'zHI FgW  
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HYadUEZSdq fA MYU'gdjU YOSSNI WadJWB'Gih'5ZfW

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HYadUEZSdq fA MYU'gdj U YOSSNI WadJbWbGih'5ZjW

)LJ &RPSOLDQFH SHU ,WHP SHU 'HPRJUDSKLF 9DULD  
7UHDWPHQW

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WUZHONGYUAN

: fca`hYfyj`lg`hYZ`ckjh`'gl`bZWHUggVUjdg`VlkYb`hYX'ad fUd jW  
jUfUy'gUBXNI Wad jUBW'before UWH jYbhYJ5HRUYfYchX'

- x [YXfUfUW'gg'XWfYXUHU%`'yY'czgl`bZWBW'
- x YXWj'cb'i UZ'WUj'dg'gUy'g'XWfYXUHU)1`'yY'czgl`bZWBW'ehY  
UggVUj'cbVUj`'acXUUY'
- x J5H\_bck`YXfUfUy'g'XWfYXUHU)1`'yY'czgl`bZWBW'Ubx
- x J5H\_bck`YXfUfUW'gg'XWfYXUHU%`'yY'czgl`bZWBW'ehY  
UggVUj'cbVUj`'acXUUY'

HYZ`ckjh`'gl`bZWHUggVUj'cb`VlkYb`hYX'ad fUd jYUfUy'g`UBXNI`  
Wad jUBW'after UWH jYbhYJ5HRUY'gchX'

- x YXWj'cb'i UZ'WUj'dg'gUy'g'XWfYXk\`YbhYfY'gU'j'BUU'g'jYbhYJ5H  
fUHUHU%`'yY'czgl`bZWBW'

HYfUfY'bc`gl`bZWHUggVUj'cb'gk`h`RI Wad jUBW'Z'fU'nicZ'hYchY'j UfUy'g`  
j'U'nicZ'hYchY'g'hU'j'cb'U'f'UWH jYbhYJ5HRUYk\`YfY'g'U'XW'U'g`  
j'bhYJ5HRUY'U'X'f'k\`Y'Y'd'f'U'g'g'U'f'Y'j'c'j`Y'X'f'g'U'j'bhY'g'h`'c'g'j'U'j'cb`  
h'U'cb'n'X'W'j'cb'i UZ'WUj'dg'g'U'f'U'f'U'Z'W'U'W' Wad jUBW'X'U'j'c'f'k\`YbhYfY`  
g'UWH jYbhYJ5HRUY'

Hcg'X'ad fUd jYUfUy'g'k\`Y'Y'U'g'j' bZWHUggVUj'cb'k'g`X'W'U'X'W'Z'f'Y`  
U'X'f'U'f'U'J5HRUY'WUj`Y'E'h'a`Y'm`Y'X'Z'Y'W'j'cb'i UZ'WUj'dg'U'X'J5H`  
\_bck`Y'Y'E'U'f'Y'bc`X'g'U'g'X'j'ba'c'Y'X'U'"H'Y'Z'W'Z'U'Y'cb'RI Wad jUBW'g`  
bc'h'g'U'g'X'Z'f'h'Y'Z'g'h'k'g'bc'h'y`X'h'U'h'cg'Y'k\`c'U'f'Y'c'X'f'k'Y'Y'ad'Y'RI`



Yd fU'zHI FyLW

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Yci fBUcZHI FyGUW

HYjadUEZSAd fda MYUfUvGdhj U YOXXXU WadJUBWbGih 5ZJW

UgdffMMBghkjh Uj Uj iYJ5H\_bck YX YdfUVnk bdi\_bck k\JWd fWUgG  
UfYUckXle VXXVXX

HYfyg'lg' bXWUj 'hUJ5H\_bck YX YJzi YWgRU 'WadJUBWg ddbfhY  
ZbMhgCZ? JFWY UXA UW/cj gn fSS%E?kc 'UBXMdfSS%EUxGdh 'UBX  
MfVci [\ f%, Ek\cZibXhUk\ Yb]nj XUG\Uj YUWmf\_bck YX YcZU UB  
\| \Y Y YgcZU Yh]gh YmfYacfWadJUf

FY Uxh UacibgXWfXk\ YbMYkMYWUj Yg]bhYJ5HfUzbc'g] bZWH  
UgcWU]cbVlkYbRU 'bck YX YUBXU WadJUBWklghcXhigAmthYgg<(6'  
klghdij ddbX5 hci [\ hYfyg'lg' UfYbdjUg]W ng] bZWHk\ YhMYklg  
U]bWUgY]bhYJ5HfUz dffMMBghkjh 'hYacgJ5H\_bck YX YPhXXle'  
VWáY hY acghbdWadJUf H'lg'klg YdMXX Ug hcgY kjh' acY J5H  
\_bck YX YWá XdPh]U nU gYhYggá UbX]Xh]Zm'cod c Ygc'a ]h]g]hYf  
J5H]U]h

H YgU]g hYWfYU]cbVlkYb`y YgcZYXWU]cbUbXdmVj YX Y YgcZJ5H  
\_bck YX YZU? fi g U]KU]gNgiklgfi bX Yle hYcX]U'bu]fYcZHYXWU]cb  
XU': fca 'HVY(z]h]g'y]Xh]hU]hY Y]g'bc'gU]g]W ng] bZWHhXZfWY  
VlkYb`y YgcZYXWU]cbUbXdmVj YX Y YgcZJ5H\_bck YX Y

7DEOH 7HVV 6WDWLVLWLFV IRU .UXVND0 :DOOLV 9\$7 .Q

7RWDO Q	%%
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Yd fU'zHI FgUW

HYjadU'ZSdq fU'WU'Vgdj U'YOSXNI WadJUBWbGih'5ZUW

7DEOH 0HDQ 5DQNV 9\$7 .QRZOHGJH 3HUFHSWLRQ

5DQ'NV			
.	(GXFDWLRQ	1	0HDQ UDQN
	<b>AUW'ckY</b>	,'	'','('
	<b>DgJaU'W</b>	'%	*)'%'
.QRZOH	<b>GUW'cb</b>	),'	*,')'

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YdibUcZHI FyQW

HYjadUEZSdq fda MYUfUygdj U YOSSNI Wad]UBWbGih'5Z]W

5b]bH5/ '5g]bHZN 8%žIBi X]H 'Zf]M 'Wad]UBW'5'a YUUBUnggZIN9K!7HYZf  
9i fodNb9Wbca]MfYQAW8]g]gcbDdM'%)!"

6W]Z; 'G%\*, ži7]a YU8d]b]g'a Yh'5b]Wbca]Wd]c]W]Journal of Political Economyž c'"  
+\*žc'&d]%'!&%"

6fc]a]Už<ž; Yg]WZD/ 'GY\_odz@8%žik Uth]U]b]b]M]gh] M] Wad]UBW]fci[\`  
d]g]j]Yf]k]U]g]Journal of Public Policyž c'" \*žc" žd]", %(\$!"

Gi f]ng; %-)žHYWZf]f]Xa]n]X]Y]X]U]g]b]Wbca]W]X]c]M]f]Y]Q]W]The Journal  
of Economic Perspectivesž c'"ž

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YdibUcZHI FgUW

HYjadUkZSdq fU MYUfUvghj U YOXXNI WadJUBWbGih'5ZUW

?d`Yz7ZaiX`VUWZG/ ?JWYz9'88%ZiHi gäckYzUBNI WadJUBWYHghj hYfgldMmñ  
gcdYZA`Kcf\_I`Uach`gZYadonXNI dimgZJ]YbUI hj YgjmrcZ9McaJYUbx  
GigbYg-HMbUjduHIUjcbFYglAWDlMGMVgBc'88%)žJ]YHz%>`r5jUUVY  
U\lbg#lMgggbWg#g' #lMgAZa3UgUWFXI&&(, , \*!"

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