

```

cap cd "Z:\"
cap log close
log using "Gallup_macro.log", text replace
* Make sure cutedpdf is the default printer
clear
set mem 200m
set more off
use gallup_macro.dta /*Don't use the original "file.dta" provided by Gallup */
set more on

*** Table 1
reg sat_current_hat lgdp, robust
reg sat_current_hat lgdp if gdp>15000, robust
reg sat_current_hat lgdp if gdp<15000, robust
gen rich=gdp>=15000
gen richXlgdp=rich*lgdp
reg sat_current_hat lgdp rich richXlgdp, robust

*** Figure 4
lowess sat_current_hat lgdp, nograph gen(sat_current_hat_low)
reg sat_current_hat lgdp, robust
predict sat_current_hat_fit
local b=_b[lgdp]
local se=string(round(_se[lgdp],.001),"%4.3f")
local b=string(round(`b',.001), "%4.3f")
local a=string(round(_b[_cons],.001), "%4.3f")
correl sat_current_hat lgdp
local rho=string(round(r(rho),.01), "%3.2f")

#delimit ;
twoway
    (scatter sat_current_hat gdp, mlabel(cty) mlabpos(12) mcolor(navy) mlabcolor(navy))
    (line sat_current_hat_low gdp, sort lpattern(dot) lcolor(cranberry))
    (line sat_current_hat_fit gdp, sort lpattern(longdash) lcolor(black))
    ,
    note("y=`a'+`b'*ln(x) [se=`se']" "Correlation=`rho'", ring(0) pos(5) size(medsmall))
    xlabel(500 "0.5" 1000 "1" 2000 "2" 4000 "4" 8000 "8" 16000 "16" 32000 "32")
    xtitle("Real GDP per capita, (thousands of dollars, log scale)", size(small))
    xscale(log)
    legend(off)
    ytitle("Life satisfaction (ordered probit index)", size(small))
    ylabel(-1.5(0.5)1.5, angle(horizontal) format(%4.1f))
    xsize(10) ysize(7.5)
    name(fig4, replace)
;

#delimit cr
graph save fig4, replace
graph export fig4.eps, fontface(Times) replace
graph export fig4.tif, replace

*** Figure 7
use gallup_macro.dta, clear
lowess sat_current_hat lgdp, nograph gen(sat_current_hat_low)
reg sat_current_hat lgdp, robust
predict sat_current_hat_fit
global sel=string(round(_se[lgdp],.001),"%4.3f")
global bl=string(round(_b[lgdp],.001), "%4.3f")
global al=string(round(_b[_cons],.001), "%4.3f")
correl sat_current_hat lgdp
global rhol=string(round(r(rho),.01), "%4.3f")

cap drop *_fit2 *_low2
lowess sat_current_hat gdp, nograph gen(sat_current_hat_low2)
reg sat_current_hat gdp, robust
predict sat_current_hat_fit2
global b2=_b[gdp]
global se2=string(round(1000*_se[gdp],.001),"%4.3f")

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global b2=string(round(1000*$b2,.001), "%4.3f")
global a2=string(round(_b[_cons],.001), "%4.3f")
correl sat_current_hat gdp
global rho2=string(round(r(rho),.01), "%4.3f")

#delimit ;
twoway
    (scatter sat_current_hat gdp, mlabel(cty) mlabpos(12) mlabcolor(navy) mcolor(navy))
    (line sat_current_hat_fit gdp, sort lpattern(longdash) lcolor(black) lwidth
(medthick))
    (line sat_current_hat_fit2 gdp, sort lpattern(shortdash) lcolor(green) lwidth
(medthick))
    ,
    title("Log income scale")
    xtitle("")
    xlabel(500 "0.5" 1000 "1" 2000 "2" 4000 "4" 8000 "8" 16000 "16" 32000 "32")
    xscale(log)
    legend(off)
    ylabel(-1.5(0.5)1.5, angle(horizontal) format(%4.1f) )
    xsize(10) ysize(7.5)
    name(sat_log, replace)
;
#delimit cr

#delimit ;
twoway
    (scatter sat_current_hat gdp, mlabel(cty) mlabpos(12) mlabcolor(navy) mcolor(navy))
    (line sat_current_hat_fit gdp, sort lpattern(longdash) lcolor(black) lwidth
(medthick))
    (line sat_current_hat_fit2 gdp, sort lpatter(shortdash) lcolor(green) lwidth
(medthick))
    ,
    title("Linear income scale")
    xlabel(0 "0" 10000 "10" 20000 "20" 30000 "30" 40000 "40")
    xtitle("")
    legend(off)
    ylabel(-1.5(0.5)1.5, angle(horizontal) format(%4.1f) )
    xsize(10) ysize(7.5)
    name(sat_linear, replace)
;
#delimit cr

#delimit ;
graph combine sat_linear sat_log,
    ycommon
    imargin(tiny)
    rows(1)
    xsize(10) ysize(7.5)
    l1title("Life satisfaction (ordered probit index)", size(small))
    b2title("Real GDP per capita (thousands of dollars)", size(small))
;
#delimit cr
graph save fig7, replace
graph export fig7.eps, fontface(Times) replace
graph export fig7.tif, replace

* Figure 22
global feelings "enjoyment pain worry sadness boredom depression anger love"

foreach v of global feelings {
    display("Feeling: `v'")
    reg feelings_`v'_yes lgdp
    predict feelings_`v'_yes_fit
    local b=_b[lgdp]
    local se=string(_se[lgdp], "%4.2f")
    local t=string(round(`b'/`se',.01), "%4.2f")
    local b=string(round(`b',.001), "%4.2f")

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local a=string(round(_b[_cons],.001), "%4.1f")
correl feelings_`v'_yes lgdp
local rho=string(round(r(rho),.01), "%3.2f")
local lb: var lab feelings_`v'_yes
local lb=subinstr("`lb'", "Percent Feeling ", "", 1)
lowess feelings_`v'_yes lgdp, nograph gen(feelings_`v'_yes_low)
#delimit ;
twoway
    (scatter feelings_`v'_yes gdp, mlabpos(0) msymbol(circle) mcolor(navy))
    (line feelings_`v'_yes_low gdp, sort lpattern(dot))
    (line feelings_`v'_yes_fit gdp, sort lpattern(solid))
,
    title("`lb'", ring(0))
    subtitle(" " "Correlation: `rho'", ring(0))
    note("y=`a'+`b'*ln(x) [se=`se']", ring(0) size(small))
    xtick(500 1000 2000 4000 8000 16000 32000)
    xlabel(500 "0.5" 2000 "2" 8000 "8" 32000 "32")
    xtitle("")
    xscale(log)
    legend(off)
    ylabel(0(20)80, angle(horizontal))
    ytick(0(20)100)
    xsize(10) ysize(7.5)
    name(`v', replace)
;
#delimit cr
}

#delimit ;
graph combine $feelings,
    imargin(zero)
    rows(2)
    bltitle("Real GDP per capita (thousands of dollars, log scale)", size(small))
    lltitle("Percent reporting indicated feeling", size(small))
    xsize(10) ysize(7.5)
    name(fig22, replace)
;
#delimit cr
graph save fig22, replace
graph export fig22.eps, fontface(Times) replace
graph export fig22.tif, replace

* Figure 23
global yesterday "moredays wellrested respect choose smile proud lean goodfood"

foreach v of global yesterday {
    display("Feeling: `v'")
    reg yesterday_`v'_yes lgdp
    predict yesterday_`v'_yes_fit
    local b=_b[lgdp]
    local se=string(_se[lgdp], "%4.2f")
    local t=string(round(`b'/`se',.01), "%4.2f")
    local b=string(round(`b',.001), "%4.2f")
    local a=string(round(_b[_cons],.001), "%4.1f")
    correl yesterday_`v'_yes lgdp
    local rho=string(round(r(rho),.01), "%3.2f")
    local lb: var lab yesterday_`v'_yes
    local lb=subinstr("`lb'", "Percent Feeling ", "", 1)
    local lbwrds=wordcount("`lb'")
    local lbwrds2=int(`lbwrds'/2)
    foreach i of numlist 1/`lbwrds2' {
        local lb1=""lb1'+word("`lb'",`i')+ "
    }
    local lbwrds2=`lbwrds2'+1
    foreach i of numlist `lbwrds2'/`lbwrds' {
        local lb2=""lb2'+word("`lb'",`i')+ "
    }
}

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```

lowess yesterday_`v'_yes lgdp, nograph gen(yesterday_`v'_yes_low)
#delimit ;
twoway
    (scatter yesterday_`v'_yes gdp, mlabpos(0) msymbol(circle) mcolor(navy))
    (line yesterday_`v'_yes_low gdp, sort lpattern(dot))
    (line yesterday_`v'_yes_fit gdp, sort lpattern(solid))
,
    title("`lb1'" "`lb2'", size(medsmall) span)
    note( "Correlation = `rho'"
        "y=`a'+`b'*ln(x) [se=`se']",
        ring(0) size(small))
    xtick(500 1000 2000 4000 8000 16000 32000)
    xlabel(500 "0.5" 2000 "2" 8000 "8" 32000 "32")
    xtitle("")
    xscale(log)
    legend(off)
    ylabel(0(20)80, angle(horizontal))
    ytick(0(20)100)
    xsize(10) ysize(7.5)
    name(`v', replace)
;
#delimit cr
local lb1=""
local lb2=""
}

#delimit ;
graph combine $yesterday,
    imargin(zero)
    rows(2)
    bltitle("Real GDP per capita (thousands of dollars, log scale)", size(small))
    lltitle("Percent reporting indicated feeling", size(small))
    xsize(10) ysize(7.5)
    name(fig23, replace)
;
#delimit cr
graph save fig23, replace
graph export fig23.eps, fontface(Times) replace
graph export fig23.tif, replace

log close

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/*
***** Working paper stuff below this *****

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*** Figure 4

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```

global sat "sat_current sat_past sat_future"
global feelings "enjoyment pain worry sadness boredom depression anger love"
global yesterday "moredays wellrested respect choose smile proud lean goodfood"

lowess sat_current_hat lgdp, nograph gen(sat_current_hat_low)
reg sat_current_hat lgdp
predict sat_current_hat_fit
local b=_b[lgdp]
local se=string(round(_se[lgdp],.001),"%4.3f")
local b=string(round(`b',.001), "%4.3f")
local a=string(round(_b[_cons],.001), "%4.3f")
correl sat_current_hat lgdp
local rho=string(round(r(rho),.01), "%3.2f")
#delimit ;
twoway

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(scatter sat_current_hat gdp, mlabel(cty) mlabpos(12))
(line sat_current_hat_low gdp, sort lpattern(dot))
(line sat_current_hat_fit gdp, sort lpattern(longdash) lcolor(black))
'
title("Life Satisfaction and Real GDP per Capita")
note("y=`a'+`b'*ln(x) [se=`se']" "Correlation=`rho'", ring(0) pos(5) size(medsmall))
xlabel(500 1000 2000 4000 8000 16000 32000)
xtitle("Real GDP per capita, PPP (log scale)")
xscale(log)
legend(off)
yttitle("Best Possible Life Ladder: Ordered Probit Index")
ylabel(-1.5(0.5)1.5, angle(horizontal))
caption("Dashed line shows linear regression; dotted line shows lowess fit.")
"Source: Gallup World Poll, 2006", span size(small))
xsize(10) ysize(7.5)
name(sat, replace)
;
#delimit cr

la var sat_past "Recall: 5 years ago"
la var sat_future "Expected in 5 years"
la var sat_current "Current"
foreach v of global sat {
    display("Satisfaction: `v'")
    reg `v'_hat lgdp
    predict `v'_hat_fit
    local b=_b[lgdp]
    local se=_se[lgdp]
    local t=string(round(`b'/`se',.01), "%4.2f")
    local b=string(round(`b',.001), "%4.2f")
    local a=string(round(_b[_cons],.001), "%4.2f")
    correl `v'_hat lgdp
    local rho=string(round(r(rho),.01), "%3.2f")
    local lb: var lab `v'
    lowess `v'_hat lgdp, nograph gen(`v'_hat_low)
    #delimit ;
    twoway
        (scatter `v'_hat gdp, mlabel(cty))
        (line `v'_hat_low gdp, sort lpattern(dot))
        (line `v'_hat_fit gdp, sort lpattern(solid))
    ,
        title("`lb'", ring(0))
        subtitle(" " "Correlation = `rho'", ring(0))
        note("y=`a'+`b'*ln(x) [t=`t']", ring(0) size(medsmall))
        xtick(500 1000 2000 4000 8000 16000 32000)
        xlabel(500 2000 8000 32000)
        xtitle("")
        xscale(log)
        legend(off)
        ylabel(-1.5(0.5)1.5, angle(horizontal))
        xsize(10) ysize(7.5)
        name(`v', replace)
    ;
    #delimit cr
}

#delimit ;
graph combine $sat,
    imargin(zero)
    rows(1)
    cols(3)
    title("Life Satisfaction and GDP")
/* note("Please imagine a ladder/mountain with steps numbered from 0 at the bottom to
10 at the top."
    "Suppose we say that the top of the ladder/mountain represents the best
possible life for you"
    "and the bottom of the ladder/mountain represents the worst possible life

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for you."
        "If the top step is 10 and the bottom step is 0, on which step of the
ladder mountain do you feel you personally stand..."
        , size(small))
*/      bltitle("Real GDP per capita, PPP (log scale)")
        lltitle("Life Satisfaction Index (Ordered probit)")
        note("Source: Gallup World Poll, 2006" "Solid line shows regression line; dotted
line is lowess fit.")
        xsize(10) ysize(7.5)
        name(sat3, replace)
;
#delimit cr
* graph print

foreach v of global feelings {
    display("Feeling: `v'")
    reg feelings_`v'_yes lgdp
    predict feelings_`v'_yes_fit
    local b=_b[lgdp]
    local se=_se[lgdp]
    local t=string(round(`b'/`se',.01), "%4.2f")
    local b=string(round(`b',.001), "%4.3f")
    local a=string(round(_b[_cons],.001), "%4.3f")
    correl feelings_`v'_yes lgdp
    local rho=string(round(r(rho),.01), "%3.2f")
    local lb: var lab feelings_`v'_yes
    local lb=subinstr("`lb'", "Percent Feeling ", "", 1)
    lowess feelings_`v'_yes lgdp, nograph gen(feelings_`v'_yes_low)
    #delimit ;
    twoway
        (scatter feelings_`v'_yes gdp, mlabel(cty) mlabpos(0) msymbol(none))
        (line feelings_`v'_yes_low gdp, sort lpattern(dot))
        (line feelings_`v'_yes_fit gdp, sort lpattern(solid))
    ,
        title("`lb'", ring(0))
        subtitle(" " "Correlation: `rho'", ring(0))
        note("y=`a'+`b'*ln(x) [t=`t']", ring(0) size(small))
        xtick(500 1000 2000 4000 8000 16000 32000)
        xlabel(500 2000 8000 32000)
        xtitle("")
        xscale(log)
        legend(off)
        ylabel(0(.2)1, angle(horizontal))
        xsize(10) ysize(7.5)
        name(`v', replace)
;
    #delimit cr
}

#delimit ;
graph combine $feelings,
    imargin(zero)
    rows(2)
    cols(4)
    title("Recalled Feelings and GDP")
    subtitle("Did you experience the following feelings during a lot of the day
yesterday?"
        , size(small))
    bltitle("Real GDP per capita, PPP (log scale)")
    lltitle("Proportion experiencing each feeling")
    note("Source: Gallup World Poll, 2006" "Solid line shows regression line; dotted
line is lowess fit.")
    xsize(10) ysize(7.5)
    name(feelings, replace)
;
#delimit cr
* graph print

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```

foreach v of global yesterday {
    display("Feeling: `v'")
    reg yesterday_`v'_yes lgdp
    predict yesterday_`v'_yes_fit
    local b=_b[lgdp]
    local se=_se[lgdp]
    local t=string(round(`b'/`se',.01), "%4.2f")
    local b=string(round(`b',.001), "%4.3f")
    local a=string(round(_b[_cons],.001), "%4.3f")
    correl yesterday_`v'_yes lgdp
    local rho=string(round(r(rho),.01), "%3.2f")
    local lb: var lab yesterday_`v'_yes
    local lb=subinstr("`lb'", "Percent Feeling ", "", 1)
    local lbwrds=wordcount("`lb'")
    local lbwrds2=int(`lbwrds'/2)
    foreach i of numlist 1/`lbwrds2' {
        local lb1=""lb1'+word("`lb'",`i')+ " "
    }
    local lbwrds2=`lbwrds2'+1
    foreach i of numlist `lbwrds2'/`lbwrds' {
        local lb2=""lb2'+word("`lb'",`i')+ " "
    }
    lowess yesterday_`v'_yes lgdp, nograph gen(yesterday_`v'_yes_low)
    #delimit ;
    twoway
        (scatter yesterday_`v'_yes gdp, mlabel(cty) mlabpos(0) msymbol(none))
        (line yesterday_`v'_yes_low gdp, sort lpattern(dot))
        (line yesterday_`v'_yes_fit gdp, sort lpattern(solid))
    ,
        title("`lb1'" "`lb2'", size(medsmall) span)
        note( "Correlation = `rho'"
            "y=`a'+`b'*ln(x) [t=`t']",
            ring(0) size(small))
        xtick(500 1000 2000 4000 8000 16000 32000)
        xlabel(500 2000 8000 32000)
        xtitle("")
        xscale(log)
        legend(off)
        ylabel(0(.2)1, angle(horizontal))
        xsize(10) ysize(7.5)
        name(`v', replace)
    ;
    #delimit cr
    local lb1=""
    local lb2=""
}

#delimit ;
graph combine $yesterday,
    imargin(zero)
    rows(2)
    cols(4)
    title("Daily Experiences and GDP")
    subtitle("Now, please think about yesterday, from the morning until the end of the
day."
    " Think about where you were, what you were doing, who you were with, and how
you felt."
    , size(small))
    bltitle("Real GDP per capita, PPP (log scale)")
    lltitle("Proportion experiencing each feeling")
    note("Source: Gallup World Poll, 2006" "Solid line shows regression line; dotted
line is lowess fit.")
    xsize(10) ysize(7.5)
    name(yesterday, replace)
;
#delimit cr
* graph print

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reg sat_current_hat gdp
predict h_gdp
reg sat_current_hat lgdp
predict h_lgdp
nl (sat_current_hat={a}+{b}*(gdp^(1-{gamma}))) if gdp~=.
predict h_crra
lowess sat_current_hat gdp, nograph gen(h_low)
#delimit ;
twoway
    (scatter sat_current_hat gdp, mlabel(cty))
    (line h_gdp gdp, sort lpattern(shortdash))
    (line h_lgdp gdp, sort lpattern(solid))
    (line h_crra gdp, sort lpattern(longdash))
    (line h_low gdp, sort lpattern(dot))
,
    legend( order(2 "Linear" 3 "Log" 4 "Power=0.64" 5 "Non-parametric"))
;
#delimit cr
* Comparison graph
use gallup_macro.dta, clear
lowess sat_current_hat lgdp, nograph gen(sat_current_hat_low)
reg sat_current_hat lgdp, robust
predict sat_current_hat_fit
global sel=string(round(_se[lgdp],.001),"%4.3f")
global bl=string(round(_b[lgdp],.001), "%4.3f")
global al=string(round(_b[_cons],.001), "%4.3f")
correl sat_current_hat lgdp
global rho1=string(round(r(rho),.01), "%4.3f")

cap drop *_fit2 *_low2
lowess sat_current_hat gdp, nograph gen(sat_current_hat_low2)
reg sat_current_hat gdp, robust
predict sat_current_hat_fit2
global b2=_b[gdp]
global se2=string(round(1000*_se[gdp],.001),"%4.3f")
global b2=string(round(1000*$b2,.001), "%4.3f")
global a2=string(round(_b[_cons],.001), "%4.3f")
correl sat_current_hat gdp
global rho2=string(round(r(rho),.01), "%4.3f")

#delimit ;
twoway
    (scatter sat_current_hat gdp, mlabel(cty) mlabpos(12))
/*    (line sat_current_hat_low gdp, sort lpattern(dot)) */
    (line sat_current_hat_fit gdp, sort lpattern(longdash) lcolor(black) lwidth
(medthick))
    (line sat_current_hat_fit2 gdp, sort lpattern(shortdash) lcolor(green) lwidth
(medthick))
,
    title("Log Income Scale", bexpand fcolor(none))
    xlabel(500 "$.5k" 1000 "$1k" 2000 "$2k" 4000 "$4k" 8000 "$8k" 16000 "$16k" 32000
"$32k", angle(45))
    xtitle("")
    xscale(log)
    legend(off)
    ylabel(-1.5(0.5)1.5, angle(horizontal))
    xsize(10) ysize(7.5)
    name(sat_log, replace)
;
#delimit cr

#delimit ;
twoway
    (scatter sat_current_hat gdp, mlabel(cty) mlabpos(12))
/*    (line sat_current_hat_low2 gdp, sort lpattern(dot)) */
    (line sat_current_hat_fit gdp, sort lpattern(longdash) lcolor(black) lwidth

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(medthick))
    (line sat_current_hat_fit2 gdp, sort lpatter(shortdash) lcolor(green) lwidth
(medthick))

    '
    title("Linear Income Scale", bexpand fcolor(none))
    xlabel(0 "$0k" 5000 "$5k" 10000 "$10k" 15000 "$15k" 20000 "$20k" 25000 "$25k" 30000
"$30k" 35000 "$35k" 40000 "$40k", angle(45))
    xtitle("")
    legend(off)
    ylabel(-1.5(0.5)1.5, angle(horizontal))
    xsize(10) ysize(7.5)
    name(sat_linear, replace)
;
#delimit cr

#delimit ;
graph combine sat_linear sat_log,
    ycommon
    imargin(tiny)
    rows(1)
    xsize(10) ysize(7.5)
    title("Assessing the Functional Form of the GDP-Satisfaction Link")
    l1title("Satisfaction Ladder: Ordered probit index")
    b2title("Real GDP per capita, PPP in 2000 US$")
    note( "Long dash shows: Satisfaction = $a1 + $b1 * Log GDP [se=$se1]. Correlation=
$rho1"
        "Short dash shows: Satisfaction = $a2 + $b2 * GDP/$1000 [se=$se2].
Correlation = $rho2",
        size(small)
    )
;

* Smile graph
lowess yesterday_smile_hat lgdp, nograph gen(yesterday_smile_hat_low)
reg yesterday_smile_hat lgdp
predict yesterday_smile_hat_fit
local b=_b[lgdp]
local se=string(round(_se[lgdp],.001),"%4.3f")
local b=string(round(`b',.001), "%4.3f")
local a=string(round(_b[_cons],.001), "%4.3f")
correl yesterday_smile_hat lgdp
local rho=string(round(r(rho),.01), "%3.2f")
#delimit ;
twoway
    (scatter yesterday_smile_hat gdp, mlabel(cty) mlabpos(12))
    (line yesterday_smile_hat_fit gdp, sort lpattern(longdash) lcolor(black))
    '
    title("Smiling, Laughing and Real GDP per Capita")
    subtitle("Did you smile or laugh a lot yesterday?", ring(0))
    note("y=`a'+`b'*ln(x) [se=`se']" "Correlation=`rho'", ring(0) pos(5) size(medsmall))
    xlabel(500 1000 2000 4000 8000 16000 32000)
    xtitle("Real GDP per capita, PPP (log scale)")
    xscale(log)
    legend(off)
    ytitle("Inverse normal (or z-score) for" "Proportion who smiled or laughed a lot
yesterday")
    ylabel(-0.5(0.5)1.5, angle(horizontal))
    caption("Dashed line shows linear regression; dotted line shows lowess fit.")
    "Source: Gallup World Poll, 2006", span size(small))
    xsize(10) ysize(7.5)
    name(smile, replace)
;
#delimit cr
drop yesterday_smile_hat_fit

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* Simplified graph for Freakonomics
drop sat_current_hat_low sat_current_hat_fit
lowess sat_current_hat lgdp, nograph gen(sat_current_hat_low)
reg sat_current_hat lgdp
predict sat_current_hat_fit
local b=_b[lgdp]
local se=string(round(_se[lgdp],.001),"%4.3f")
local b=string(round(`b',.001), "%4.3f")
local a=string(round(_b[_cons],.001), "%4.3f")
correl sat_current_hat lgdp
local rho=string(round(r(rho),.01), "%3.2f")
#delimit ;
twoway
    (scatter sat_current_hat gdp, mlabel(cty) mlabpos(12))
    (line sat_current_hat_low gdp, sort lpattern(dot))
    (line sat_current_hat_fit gdp, sort lpattern(longdash) lcolor(black))
    ,
    title("Life Satisfaction and Real GDP per Capita")
    note("y=`a'+`b'*ln(x) [se=`se']" "Correlation=`rho'", ring(0) pos(5) size(medsmall))
    xlabel(500 1000 2000 4000 8000 16000 32000)
    xtitle("Real GDP per capita, PPP (log scale)")
    xscale(log)
    legend(off)
    ytitle("Best Possible Life Ladder: Ordered Probit Index")
    ylabel(-1.5(0.5)1.5, angle(horizontal))
    caption("Dashed line shows linear regression; dotted line shows lowess fit."
"Source: Gallup World Poll, 2006", span size(small))
    xsize(10) ysize(7.5)
    name(sat, replace)
;
#delimit cr
drop sat_current_hat_fit sat_current_hat_low

*/

```