

Very unfortunately, the dataset that I used to generate the results reported in the following article:

Neumayer, Eric. 2008. Distance, Power and Ideology: Diplomatic Representation in a World of Nation-States, *Area*, 40 (2), pp. 228-236

contained several errors. The dataset posted here corrects these errors. As a result, there are a number of (fortunately on the whole minor changes) to the results reported in the article. Here's a summary of the main changes to the reported results followed by a log-file of the results with the corrected dataset:

Eric Neumayer

Summary of main changes to results:

Variables of main interest:

- The published article reports that the positive effect of ideological affinity on the likelihood of diplomatic representation of the sending in the recipient country decreases as the power of either recipient or sending country increases. In the corrected dataset, the positive effect of ideological affinity first increases and then decreases as the power of either recipient or sending country increases.

Control variables:

- The published article reports that the positive effect of GDP p.c. in recipient and sending countries are not statistically significantly different. In the corrected dataset, the effect of GDP p.c. in the recipient country is stronger than that of the sending country.
- The published article reports that former colonial ties do not have a statistically significant effect. In the corrected dataset, such former colonial ties have a negative effect on diplomatic representation.

Robustness tests:

- The published article reports that pairs of autocracies are more likely to have diplomatic representation. In the corrected dataset, they are not more likely.
- The published article reports a non-linear effect of the year of independence of the sending country. In the corrected dataset, the effect of the year of independence is positive at first (for countries having been independent for a long time) and then turns negative (such that newly independent states are less likely to establish diplomatic representation).

Log-file of the results with the corrected dataset:

```
-----  
-  
    name: <unnamed>  
    log: C:\Research\Conflict\COW\Article for Area (dipl representation).log  
    log type: text  
    opened on: 25 Sep 2011, 20:01:52  
  
. do "C:\Research\Conflict\COW\Article for Area (dipl representation).do"  
  
. version 11  
  
. set matsize 1000  
  
. tsset dyadid yearid  
    panel variable: dyadid (strongly balanced)  
    time variable: yearid, 1 to 8
```

delta: 1 unit

```
.
. * Table 1
. quietly xi: logit dr_at_recipient_dum lndistance powerpc_recipient powerpc_sender s3uni
c.s3uni
> #c.powerpc_recipient c.s3uni#c.powerpc_sender lngdppc_recipient lngdppc_sender westandruscoldummy
> dr_at_sender_dum if samedyad==0,

. su dr_at_recipient_dum lndistance powerpc_recipient powerpc_sender s3uni lngdppc_recipient
lngdpp
> c_sender c.s3uni#c.powerpc_recipient c.s3uni#c.powerpc_sender lngdppc_recipient lngdppc_sender
w
> estandruscoldummy dr_at_sender_dum bilattradegdp_sender independence_sender demdem autocautoc if
e(s
> ample)
```

Variable	Obs	Mean	Std. Dev.	Min	Max
dr_at_reci~m	133953	.3290781	.4698802	0	1
lndistance	133953	8.660738	.765104	4.308874	9.895805
powerpc_re~t	133953	-.0902882	1.018014	-2.294384	4.898831
powerpc_se~r	133953	-.0892789	1.019648	-2.294384	4.898831
s3uni	133953	.6597967	.2904011	-1	1
lngdppc_re~t	133953	7.971586	1.092886	5.384495	10.46874
lngdppc_se~r	133953	7.972003	1.092881	5.384495	10.46874
c.s3uni#					
c.					
powerpc_re~t	133953	-.1325102	.6704232	-4.692826	4.387013
c.s3uni#					
c.					
powerpc_se~r	133953	-.1323305	.6709116	-4.692826	4.387013
lngdppc_re~t	133953	7.971586	1.092886	5.384495	10.46874
lngdppc_se~r	133953	7.972003	1.092881	5.384495	10.46874
westandrus~y	133953	.5842198	.4928578	0	1
dr_at_send~m	133953	.3289437	.4698312	0	1
bilattrade~r	133953	.0022145	.0146289	0	1.158369
independen~r	133953	1933.644	48.08667	1816	1993
demdem	124922	.1760619	.3808743	0	1
autocautoc	124922	.36863	.4824353	0	1

```
.
.
. * Table 2
. xi: logit dr_at_recipient_dum lndistance powerpc_recipient powerpc_sender s3uni
c.s3uni#c.powe
> rpc_recipient c.s3uni#c.powerpc_sender lngdppc_recipient lngdppc_sender westandruscoldummy
i.year
> if samedyad==0, cluster( dyadid)
i.year _Iyear_1970-2005 (naturally coded; _Iyear_1970 omitted)
```

```
Iteration 0: log pseudolikelihood = -84862.419
Iteration 1: log pseudolikelihood = -54517.107
Iteration 2: log pseudolikelihood = -53481.871
Iteration 3: log pseudolikelihood = -53477.042
Iteration 4: log pseudolikelihood = -53477.041
```

```
Logistic regression                                Number of obs   =    133953
                                                    Wald chi2(16)  =    8309.02
                                                    Prob > chi2    =    0.0000
Log pseudolikelihood = -53477.041                Pseudo R2      =    0.3698
```

(Std. Err. adjusted for 24163 clusters in dyadid)

	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
dr_at_recipient_dum						
lndistance	-1.24964	.0240028	-52.06	0.000	-1.296684	-1.202595

powerpc_recipient	1.176947	.0540871	21.76	0.000	1.070938	1.282955
powerpc_sender	1.195194	.0538193	22.21	0.000	1.08971	1.300677
s3uni	.3776073	.0560946	6.73	0.000	.2676638	.4875508
c.s3uni#c.powerpc_recipient	-.0064314	.0718986	-0.09	0.929	-.1473501	.1344873
c.s3uni#c.powerpc_sender	.1814949	.072024	2.52	0.012	.0403304	.3226594
lngdppc_recipient	.2320047	.0169755	13.67	0.000	.1987334	.265276
lngdppc_sender	.1134973	.0175495	6.47	0.000	.0791009	.1478938
westandruscoldummy	-.4224786	.0358855	-11.77	0.000	-.4928129	-.3521444
_Iyear_1975	.4149032	.0258485	16.05	0.000	.3642411	.4655653
_Iyear_1980	.7159856	.0285267	25.10	0.000	.6600743	.7718968
_Iyear_1985	-.2493797	.0293851	-8.49	0.000	-.3069735	-.1917859
_Iyear_1990	-.2852022	.0309825	-9.21	0.000	-.3459269	-.2244776
_Iyear_1995	-.7961009	.0316612	-25.14	0.000	-.8581556	-.7340462
_Iyear_2000	-.92065	.0330641	-27.84	0.000	-.9854545	-.8558455
_Iyear_2005	-1.291742	.0875186	-14.76	0.000	-1.463276	-1.120209
_cons	7.504731	.298	25.18	0.000	6.920662	8.0888

. estat class

Logistic model for dr_at_recipient_dum

Classified	True		Total
	D	~D	
+	28255	7701	35956
-	15826	82171	97997
Total	44081	89872	133953

Classified + if predicted Pr(D) >= .5

True D defined as dr_at_recipient_dum != 0

Sensitivity	Pr(+ D)	64.10%
Specificity	Pr(- ~D)	91.43%
Positive predictive value	Pr(D +)	78.58%
Negative predictive value	Pr(~D -)	83.85%

False + rate for true ~D	Pr(+ ~D)	8.57%
False - rate for true D	Pr(- D)	35.90%
False + rate for classified +	Pr(~D +)	21.42%
False - rate for classified -	Pr(D -)	16.15%

Correctly classified	82.44%
----------------------	--------

. margins, dydx(s3uni) at(powerpc_recipient=(-2.2 -1.2 -.2 .8 1.8 2.8 3.8 4.8)) atmeans

Conditional marginal effects

Number of obs = 133953

Model VCE : Robust

Expression : Pr(dr_at_recipient_dum), predict()

dy/dx w.r.t. : s3uni

1._at	: lndistance	=	8.660738 (mean)
	powerpc_re~t	=	-2.2
	powerpc_se~r	=	-.0892789 (mean)
	s3uni	=	.6597967 (mean)
	lngdppc_re~t	=	7.971586 (mean)
	lngdppc_se~r	=	7.972003 (mean)
	westandrus~y	=	.5842198 (mean)
	_Iyear_1975	=	.1293737 (mean)
	_Iyear_1980	=	.1343456 (mean)
	_Iyear_1985	=	.1343904 (mean)
	_Iyear_1990	=	.1346368 (mean)
	_Iyear_1995	=	.1772562 (mean)
	_Iyear_2000	=	.1773906 (mean)
	_Iyear_2005	=	.0058304 (mean)
2._at	: lndistance	=	8.660738 (mean)
	powerpc_re~t	=	-1.2

	powerpc_se~r	=	-.0892789	(mean)
	s3uni	=	.6597967	(mean)
	lngdppc_re~t	=	7.971586	(mean)
	lngdppc_se~r	=	7.972003	(mean)
	westandrus~y	=	.5842198	(mean)
	_Iyear_1975	=	.1293737	(mean)
	_Iyear_1980	=	.1343456	(mean)
	_Iyear_1985	=	.1343904	(mean)
	_Iyear_1990	=	.1346368	(mean)
	_Iyear_1995	=	.1772562	(mean)
	_Iyear_2000	=	.1773906	(mean)
	_Iyear_2005	=	.0058304	(mean)
3._at	: lndistance	=	8.660738	(mean)
	powerpc_re~t	=	-.2	
	powerpc_se~r	=	-.0892789	(mean)
	s3uni	=	.6597967	(mean)
	lngdppc_re~t	=	7.971586	(mean)
	lngdppc_se~r	=	7.972003	(mean)
	westandrus~y	=	.5842198	(mean)
	_Iyear_1975	=	.1293737	(mean)
	_Iyear_1980	=	.1343456	(mean)
	_Iyear_1985	=	.1343904	(mean)
	_Iyear_1990	=	.1346368	(mean)
	_Iyear_1995	=	.1772562	(mean)
	_Iyear_2000	=	.1773906	(mean)
	_Iyear_2005	=	.0058304	(mean)
4._at	: lndistance	=	8.660738	(mean)
	powerpc_re~t	=	.8	
	powerpc_se~r	=	-.0892789	(mean)
	s3uni	=	.6597967	(mean)
	lngdppc_re~t	=	7.971586	(mean)
	lngdppc_se~r	=	7.972003	(mean)
	westandrus~y	=	.5842198	(mean)
	_Iyear_1975	=	.1293737	(mean)
	_Iyear_1980	=	.1343456	(mean)
	_Iyear_1985	=	.1343904	(mean)
	_Iyear_1990	=	.1346368	(mean)
	_Iyear_1995	=	.1772562	(mean)
	_Iyear_2000	=	.1773906	(mean)
	_Iyear_2005	=	.0058304	(mean)
5._at	: lndistance	=	8.660738	(mean)
	powerpc_re~t	=	1.8	
	powerpc_se~r	=	-.0892789	(mean)
	s3uni	=	.6597967	(mean)
	lngdppc_re~t	=	7.971586	(mean)
	lngdppc_se~r	=	7.972003	(mean)
	westandrus~y	=	.5842198	(mean)
	_Iyear_1975	=	.1293737	(mean)
	_Iyear_1980	=	.1343456	(mean)
	_Iyear_1985	=	.1343904	(mean)
	_Iyear_1990	=	.1346368	(mean)
	_Iyear_1995	=	.1772562	(mean)
	_Iyear_2000	=	.1773906	(mean)
	_Iyear_2005	=	.0058304	(mean)
6._at	: lndistance	=	8.660738	(mean)
	powerpc_re~t	=	2.8	
	powerpc_se~r	=	-.0892789	(mean)
	s3uni	=	.6597967	(mean)
	lngdppc_re~t	=	7.971586	(mean)
	lngdppc_se~r	=	7.972003	(mean)
	westandrus~y	=	.5842198	(mean)
	_Iyear_1975	=	.1293737	(mean)
	_Iyear_1980	=	.1343456	(mean)
	_Iyear_1985	=	.1343904	(mean)
	_Iyear_1990	=	.1346368	(mean)
	_Iyear_1995	=	.1772562	(mean)
	_Iyear_2000	=	.1773906	(mean)
	_Iyear_2005	=	.0058304	(mean)
7._at	: lndistance	=	8.660738	(mean)

```

powerpc_re~t      =      3.8
powerpc_se~r      =    -.0892789 (mean)
s3uni              =    .6597967 (mean)
lngdppc_re~t      =    7.971586 (mean)
lngdppc_se~r      =    7.972003 (mean)
westandrus~y      =    .5842198 (mean)
_Iyear_1975       =    .1293737 (mean)
_Iyear_1980       =    .1343456 (mean)
_Iyear_1985       =    .1343904 (mean)
_Iyear_1990       =    .1346368 (mean)
_Iyear_1995       =    .1772562 (mean)
_Iyear_2000       =    .1773906 (mean)
_Iyear_2005       =    .0058304 (mean)

8._at      : lngdistance      =    8.660738 (mean)
              powerpc_re~t    =      4.8
              powerpc_se~r    =    -.0892789 (mean)
              s3uni           =    .6597967 (mean)
              lngdppc_re~t    =    7.971586 (mean)
              lngdppc_se~r    =    7.972003 (mean)
              westandrus~y    =    .5842198 (mean)
              _Iyear_1975     =    .1293737 (mean)
              _Iyear_1980     =    .1343456 (mean)
              _Iyear_1985     =    .1343904 (mean)
              _Iyear_1990     =    .1346368 (mean)
              _Iyear_1995     =    .1772562 (mean)
              _Iyear_2000     =    .1773906 (mean)
              _Iyear_2005     =    .0058304 (mean)

```

		Delta-method		z	P> z	[95% Conf. Interval]	
		dy/dx	Std. Err.				
s3uni							
	_at						
	1	.0107577	.0050189	2.14	0.032	.000921	.0205945
	2	.0300699	.0089404	3.36	0.001	.0125469	.0475928
	3	.0663346	.0111467	5.95	0.000	.0444875	.0881817
	4	.0890504	.0185394	4.80	0.000	.0527139	.1253869
	5	.0623004	.0235639	2.64	0.008	.016116	.1084849
	6	.0268322	.0156556	1.71	0.087	-.0038522	.0575165
	7	.0092036	.0074017	1.24	0.214	-.0053034	.0237107
	8	.0029076	.0030125	0.97	0.334	-.0029968	.008812

```
. margins, dydx(s3uni) at(powerpc_sender=(-2.2 -1.2 -.2 .8 1.8 2.8 3.8 4.8)) atmeans
```

```

Conditional marginal effects      Number of obs   =    133953
Model VCE      : Robust

```

```

Expression      : Pr(dr_at_recipient_dum), predict()
dy/dx w.r.t.    : s3uni

```

```

1._at      : lngdistance      =    8.660738 (mean)
              powerpc_re~t    =    -.0902882 (mean)
              powerpc_se~r    =      -2.2
              s3uni           =    .6597967 (mean)
              lngdppc_re~t    =    7.971586 (mean)
              lngdppc_se~r    =    7.972003 (mean)
              westandrus~y    =    .5842198 (mean)
              _Iyear_1975     =    .1293737 (mean)
              _Iyear_1980     =    .1343456 (mean)
              _Iyear_1985     =    .1343904 (mean)
              _Iyear_1990     =    .1346368 (mean)
              _Iyear_1995     =    .1772562 (mean)
              _Iyear_2000     =    .1773906 (mean)
              _Iyear_2005     =    .0058304 (mean)

2._at      : lngdistance      =    8.660738 (mean)
              powerpc_re~t    =    -.0902882 (mean)
              powerpc_se~r    =      -1.2
              s3uni           =    .6597967 (mean)
              lngdppc_re~t    =    7.971586 (mean)
              lngdppc_se~r    =    7.972003 (mean)

```

	westandrus~y	=	.5842198	(mean)
	_Iyear_1975	=	.1293737	(mean)
	_Iyear_1980	=	.1343456	(mean)
	_Iyear_1985	=	.1343904	(mean)
	_Iyear_1990	=	.1346368	(mean)
	_Iyear_1995	=	.1772562	(mean)
	_Iyear_2000	=	.1773906	(mean)
	_Iyear_2005	=	.0058304	(mean)
3._at	: lndistance	=	8.660738	(mean)
	powerpc_re~t	=	-.0902882	(mean)
	powerpc_se~r	=	-.2	
	s3uni	=	.6597967	(mean)
	lngdppc_re~t	=	7.971586	(mean)
	lngdppc_se~r	=	7.972003	(mean)
	westandrus~y	=	.5842198	(mean)
	_Iyear_1975	=	.1293737	(mean)
	_Iyear_1980	=	.1343456	(mean)
	_Iyear_1985	=	.1343904	(mean)
	_Iyear_1990	=	.1346368	(mean)
	_Iyear_1995	=	.1772562	(mean)
	_Iyear_2000	=	.1773906	(mean)
	_Iyear_2005	=	.0058304	(mean)
4._at	: lndistance	=	8.660738	(mean)
	powerpc_re~t	=	-.0902882	(mean)
	powerpc_se~r	=	.8	
	s3uni	=	.6597967	(mean)
	lngdppc_re~t	=	7.971586	(mean)
	lngdppc_se~r	=	7.972003	(mean)
	westandrus~y	=	.5842198	(mean)
	_Iyear_1975	=	.1293737	(mean)
	_Iyear_1980	=	.1343456	(mean)
	_Iyear_1985	=	.1343904	(mean)
	_Iyear_1990	=	.1346368	(mean)
	_Iyear_1995	=	.1772562	(mean)
	_Iyear_2000	=	.1773906	(mean)
	_Iyear_2005	=	.0058304	(mean)
5._at	: lndistance	=	8.660738	(mean)
	powerpc_re~t	=	-.0902882	(mean)
	powerpc_se~r	=	1.8	
	s3uni	=	.6597967	(mean)
	lngdppc_re~t	=	7.971586	(mean)
	lngdppc_se~r	=	7.972003	(mean)
	westandrus~y	=	.5842198	(mean)
	_Iyear_1975	=	.1293737	(mean)
	_Iyear_1980	=	.1343456	(mean)
	_Iyear_1985	=	.1343904	(mean)
	_Iyear_1990	=	.1346368	(mean)
	_Iyear_1995	=	.1772562	(mean)
	_Iyear_2000	=	.1773906	(mean)
	_Iyear_2005	=	.0058304	(mean)
6._at	: lndistance	=	8.660738	(mean)
	powerpc_re~t	=	-.0902882	(mean)
	powerpc_se~r	=	2.8	
	s3uni	=	.6597967	(mean)
	lngdppc_re~t	=	7.971586	(mean)
	lngdppc_se~r	=	7.972003	(mean)
	westandrus~y	=	.5842198	(mean)
	_Iyear_1975	=	.1293737	(mean)
	_Iyear_1980	=	.1343456	(mean)
	_Iyear_1985	=	.1343904	(mean)
	_Iyear_1990	=	.1346368	(mean)
	_Iyear_1995	=	.1772562	(mean)
	_Iyear_2000	=	.1773906	(mean)
	_Iyear_2005	=	.0058304	(mean)
7._at	: lndistance	=	8.660738	(mean)
	powerpc_re~t	=	-.0902882	(mean)
	powerpc_se~r	=	3.8	
	s3uni	=	.6597967	(mean)
	lngdppc_re~t	=	7.971586	(mean)

```

lngdppc_se~r      =      7.972003 (mean)
westandrus~y      =      .5842198 (mean)
_Iyear_1975       =      .1293737 (mean)
_Iyear_1980       =      .1343456 (mean)
_Iyear_1985       =      .1343904 (mean)
_Iyear_1990       =      .1346368 (mean)
_Iyear_1995       =      .1772562 (mean)
_Iyear_2000       =      .1773906 (mean)
_Iyear_2005       =      .0058304 (mean)

```

```

8._at      : lndistance      =      8.660738 (mean)
              powerpc_re~t    =     -.0902882 (mean)
              powerpc_se~r    =              4.8
              s3uni           =      .6597967 (mean)
              lngdppc_re~t     =      7.971586 (mean)
              lngdppc_se~r     =      7.972003 (mean)
              westandrus~y     =      .5842198 (mean)
              _Iyear_1975      =      .1293737 (mean)
              _Iyear_1980      =      .1343456 (mean)
              _Iyear_1985      =      .1343904 (mean)
              _Iyear_1990      =      .1346368 (mean)
              _Iyear_1995      =      .1772562 (mean)
              _Iyear_2000      =      .1773906 (mean)
              _Iyear_2005      =      .0058304 (mean)

```

		Delta-method		z	P> z	[95% Conf. Interval]	
		dy/dx	Std. Err.				
s3uni							
_at	1	-.0004541	.0038335	-0.12	0.906	-.0079676	.0070594
	2	.0114429	.0079554	1.44	0.150	-.0041494	.0270351
	3	.0619808	.0110821	5.59	0.000	.0402603	.0837013
	4	.1301072	.018195	7.15	0.000	.0944456	.1657688
	5	.1074395	.0199537	5.38	0.000	.068331	.146548
	6	.0487331	.0111387	4.38	0.000	.0269016	.0705647
	7	.0172016	.0045331	3.79	0.000	.008317	.0260862
	8	.0055468	.0016222	3.42	0.001	.0023674	.0087262

. margins, dydx(*) atmeans

```

Conditional marginal effects      Number of obs   =      133953
Model VCE      : Robust

```

```

Expression      : Pr(dr_at_recipient_dum), predict()
dy/dx w.r.t.    : lndistance powerpc_recipient powerpc_sender s3uni lngdppc_recipient lngdppc_sender
                  westandruscoldummy _Iyear_1975 _Iyear_1980 _Iyear_1985 _Iyear_1990 _Iyear_1995
                  _Iyear_2000 _Iyear_2005

```

```

at      : lndistance      =      8.660738 (mean)
              powerpc_re~t    =     -.0902882 (mean)
              powerpc_se~r    =     -.0892789 (mean)
              s3uni           =      .6597967 (mean)
              lngdppc_re~t     =      7.971586 (mean)
              lngdppc_se~r     =      7.972003 (mean)
              westandrus~y     =      .5842198 (mean)
              _Iyear_1975      =      .1293737 (mean)
              _Iyear_1980      =      .1343456 (mean)
              _Iyear_1985      =      .1343904 (mean)
              _Iyear_1990      =      .1346368 (mean)
              _Iyear_1995      =      .1772562 (mean)
              _Iyear_2000      =      .1773906 (mean)
              _Iyear_2005      =      .0058304 (mean)

```

		Delta-method		z	P> z	[95% Conf. Interval]	
		dy/dx	Std. Err.				
lndistance		-.2435535	.0048928	-49.78	0.000	-.2531433	-.2339638
powerpc_recipient		.2285587	.0047955	47.66	0.000	.2191596	.2379577
powerpc_sender		.2562811	.0052475	48.84	0.000	.2459963	.2665659
s3uni		.0705504	.0113977	6.19	0.000	.0482113	.0928894
lngdppc_recipient		.0452175	.0032738	13.81	0.000	.0388009	.051634

lngdppc_sender	.0221205	.0034121	6.48	0.000	.015433	.0288081
westandruscoldummy	-.0823407	.0069673	-11.82	0.000	-.0959963	-.068685
_Iyear_1975	.0808642	.0050894	15.89	0.000	.0708891	.0908393
_Iyear_1980	.1395449	.0056698	24.61	0.000	.1284323	.1506574
_Iyear_1985	-.0486038	.0056581	-8.59	0.000	-.0596935	-.0375142
_Iyear_1990	-.0555856	.0059612	-9.32	0.000	-.0672694	-.0439019
_Iyear_1995	-.1551593	.00606	-25.60	0.000	-.1670366	-.1432819
_Iyear_2000	-.1794337	.0063713	-28.16	0.000	-.1919212	-.1669463
_Iyear_2005	-.2517593	.0171537	-14.68	0.000	-.2853798	-.2181387

```

.
.
. xi: logit dr_at_recipient_dum lndistance powerpc_recipient powerpc_sender s3uni
c.s3uni#c.powe
> rpc_recipient c.s3uni#c.powerpc_sender lngdppc_recipient lngdppc_sender westandruscoldummy
dr_at_
> sender_dum i.year if samedyad=0, cluster(dyadid)
i.year _Iyear_1970-2005 (naturally coded; _Iyear_1970 omitted)

```

```

Iteration 0: log pseudolikelihood = -84862.419
Iteration 1: log pseudolikelihood = -43506.81
Iteration 2: log pseudolikelihood = -41116.894
Iteration 3: log pseudolikelihood = -41000.456
Iteration 4: log pseudolikelihood = -41000.063
Iteration 5: log pseudolikelihood = -41000.063

```

Logistic regression	Number of obs	=	133953
	Wald chi2(17)	=	20579.66
	Prob > chi2	=	0.0000
	Pseudo R2	=	0.5169

Log pseudolikelihood = -41000.063

(Std. Err. adjusted for 24163 clusters in dyadid)

dr_at_recipient_dum	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
lndistance	-.8168406	.023162	-35.27	0.000	-.8622374	-.7714438
powerpc_recipient	.6436045	.0338498	19.01	0.000	.5772601	.7099489
powerpc_sender	.7462046	.0345973	21.57	0.000	.6783951	.8140142
s3uni	.2426203	.0549622	4.41	0.000	.1348963	.3503443
c.s3uni#c.powerpc_recipient	-.0399292	.0452778	-0.88	0.378	-.128672	.0488136
c.s3uni#c.powerpc_sender	.3128501	.0462382	6.77	0.000	.2222249	.4034752
lngdppc_recipient	.1763105	.0180176	9.79	0.000	.1409966	.2116243
lngdppc_sender	.0434245	.0188312	2.31	0.021	.0065159	.0803331
westandruscoldummy	-.3711394	.0381747	-9.72	0.000	-.4459605	-.2963183
dr_at_sender_dum	2.828769	.0310513	91.10	0.000	2.76791	2.889628
_Iyear_1975	.2858179	.0341021	8.38	0.000	.218979	.3526568
_Iyear_1980	.4965272	.0375236	13.23	0.000	.4229822	.5700721
_Iyear_1985	-.1217223	.0373889	-3.26	0.001	-.1950033	-.0484414
_Iyear_1990	-.1346721	.0385441	-3.49	0.000	-.2102172	-.059127
_Iyear_1995	-.4636652	.0383281	-12.10	0.000	-.5387869	-.3885435
_Iyear_2000	-.5479985	.039651	-13.82	0.000	-.625713	-.470284
_Iyear_2005	-.7590784	.1058953	-7.17	0.000	-.9666295	-.5515273
_cons	3.539788	.3117743	11.35	0.000	2.928721	4.150854

. estat class

Logistic model for dr_at_recipient_dum

Classified	True		Total
	D	~D	
+	35485	7826	43311
-	8596	82046	90642
Total	44081	89872	133953

Classified + if predicted Pr(D) >= .5
True D defined as dr_at_recipient_dum != 0

	lngdppc_re~t	=	7.971586 (mean)
	lngdppc_se~r	=	7.972003 (mean)
	westandrus~y	=	.5842198 (mean)
	dr_at_send~m	=	.3289437 (mean)
	_Iyear_1975	=	.1293737 (mean)
	_Iyear_1980	=	.1343456 (mean)
	_Iyear_1985	=	.1343904 (mean)
	_Iyear_1990	=	.1346368 (mean)
	_Iyear_1995	=	.1772562 (mean)
	_Iyear_2000	=	.1773906 (mean)
	_Iyear_2005	=	.0058304 (mean)
5._at	: lndistance	=	8.660738 (mean)
	powerpc_re~t	=	1.8
	powerpc_se~r	=	-.0892789 (mean)
	s3uni	=	.6597967 (mean)
	lngdppc_re~t	=	7.971586 (mean)
	lngdppc_se~r	=	7.972003 (mean)
	westandrus~y	=	.5842198 (mean)
	dr_at_send~m	=	.3289437 (mean)
	_Iyear_1975	=	.1293737 (mean)
	_Iyear_1980	=	.1343456 (mean)
	_Iyear_1985	=	.1343904 (mean)
	_Iyear_1990	=	.1346368 (mean)
	_Iyear_1995	=	.1772562 (mean)
	_Iyear_2000	=	.1773906 (mean)
	_Iyear_2005	=	.0058304 (mean)
6._at	: lndistance	=	8.660738 (mean)
	powerpc_re~t	=	2.8
	powerpc_se~r	=	-.0892789 (mean)
	s3uni	=	.6597967 (mean)
	lngdppc_re~t	=	7.971586 (mean)
	lngdppc_se~r	=	7.972003 (mean)
	westandrus~y	=	.5842198 (mean)
	dr_at_send~m	=	.3289437 (mean)
	_Iyear_1975	=	.1293737 (mean)
	_Iyear_1980	=	.1343456 (mean)
	_Iyear_1985	=	.1343904 (mean)
	_Iyear_1990	=	.1346368 (mean)
	_Iyear_1995	=	.1772562 (mean)
	_Iyear_2000	=	.1773906 (mean)
	_Iyear_2005	=	.0058304 (mean)
7._at	: lndistance	=	8.660738 (mean)
	powerpc_re~t	=	3.8
	powerpc_se~r	=	-.0892789 (mean)
	s3uni	=	.6597967 (mean)
	lngdppc_re~t	=	7.971586 (mean)
	lngdppc_se~r	=	7.972003 (mean)
	westandrus~y	=	.5842198 (mean)
	dr_at_send~m	=	.3289437 (mean)
	_Iyear_1975	=	.1293737 (mean)
	_Iyear_1980	=	.1343456 (mean)
	_Iyear_1985	=	.1343904 (mean)
	_Iyear_1990	=	.1346368 (mean)
	_Iyear_1995	=	.1772562 (mean)
	_Iyear_2000	=	.1773906 (mean)
	_Iyear_2005	=	.0058304 (mean)
8._at	: lndistance	=	8.660738 (mean)
	powerpc_re~t	=	4.8
	powerpc_se~r	=	-.0892789 (mean)
	s3uni	=	.6597967 (mean)
	lngdppc_re~t	=	7.971586 (mean)
	lngdppc_se~r	=	7.972003 (mean)
	westandrus~y	=	.5842198 (mean)
	dr_at_send~m	=	.3289437 (mean)
	_Iyear_1975	=	.1293737 (mean)
	_Iyear_1980	=	.1343456 (mean)
	_Iyear_1985	=	.1343904 (mean)
	_Iyear_1990	=	.1346368 (mean)
	_Iyear_1995	=	.1772562 (mean)
	_Iyear_2000	=	.1773906 (mean)

_Iyear_2005 = .0058304 (mean)

		Delta-method		z	P> z	[95% Conf. Interval]	
		dy/dx	Std. Err.				
s3uni							
	_at						
	1	.0218112	.0090241	2.42	0.016	.0041243	.039498
	2	.0308411	.0100792	3.06	0.002	.0110861	.050596
	3	.0389227	.0102129	3.81	0.000	.0189058	.0589397
	4	.0416236	.0136872	3.04	0.002	.0147971	.0684501
	5	.0357042	.0221196	1.61	0.106	-.0076495	.0790579
	6	.0234044	.0288289	0.81	0.417	-.0330993	.0799081
	7	.010979	.0293931	0.37	0.709	-.0466304	.0685883
	8	.0026962	.0248402	0.11	0.914	-.0459897	.0513821

. margins, dydx(s3uni) at(powerpc_sender=(-2.2 -1.2 -.2 .8 1.8 2.8 3.8 4.8)) atmeans

Conditional marginal effects
Model VCE : Robust

Number of obs = 133953

Expression : Pr(dr_at_recipient_dum), predict()
dy/dx w.r.t. : s3uni

```

1._at      : lndistance      = 8.660738 (mean)
              powerpc_re~t   = -.0902882 (mean)
              powerpc_se~r   = -2.2
              s3uni          = .6597967 (mean)
              lngdppc_re~t   = 7.971586 (mean)
              lngdppc_se~r   = 7.972003 (mean)
              westandrus~y   = .5842198 (mean)
              dr_at_send~m   = .3289437 (mean)
              _Iyear_1975    = .1293737 (mean)
              _Iyear_1980    = .1343456 (mean)
              _Iyear_1985    = .1343904 (mean)
              _Iyear_1990    = .1346368 (mean)
              _Iyear_1995    = .1772562 (mean)
              _Iyear_2000    = .1773906 (mean)
              _Iyear_2005    = .0058304 (mean)

2._at      : lndistance      = 8.660738 (mean)
              powerpc_re~t   = -.0902882 (mean)
              powerpc_se~r   = -1.2
              s3uni          = .6597967 (mean)
              lngdppc_re~t   = 7.971586 (mean)
              lngdppc_se~r   = 7.972003 (mean)
              westandrus~y   = .5842198 (mean)
              dr_at_send~m   = .3289437 (mean)
              _Iyear_1975    = .1293737 (mean)
              _Iyear_1980    = .1343456 (mean)
              _Iyear_1985    = .1343904 (mean)
              _Iyear_1990    = .1346368 (mean)
              _Iyear_1995    = .1772562 (mean)
              _Iyear_2000    = .1773906 (mean)
              _Iyear_2005    = .0058304 (mean)

3._at      : lndistance      = 8.660738 (mean)
              powerpc_re~t   = -.0902882 (mean)
              powerpc_se~r   = -.2
              s3uni          = .6597967 (mean)
              lngdppc_re~t   = 7.971586 (mean)
              lngdppc_se~r   = 7.972003 (mean)
              westandrus~y   = .5842198 (mean)
              dr_at_send~m   = .3289437 (mean)
              _Iyear_1975    = .1293737 (mean)
              _Iyear_1980    = .1343456 (mean)
              _Iyear_1985    = .1343904 (mean)
              _Iyear_1990    = .1346368 (mean)
              _Iyear_1995    = .1772562 (mean)
              _Iyear_2000    = .1773906 (mean)
              _Iyear_2005    = .0058304 (mean)

```

4._at	:	lndistance	=	8.660738	(mean)
		powerpc_re~t	=	-.0902882	(mean)
		powerpc_se~r	=	.8	
		s3uni	=	.6597967	(mean)
		lngdppc_re~t	=	7.971586	(mean)
		lngdppc_se~r	=	7.972003	(mean)
		westandrus~y	=	.5842198	(mean)
		dr_at_send~m	=	.3289437	(mean)
		_Iyear_1975	=	.1293737	(mean)
		_Iyear_1980	=	.1343456	(mean)
		_Iyear_1985	=	.1343904	(mean)
		_Iyear_1990	=	.1346368	(mean)
		_Iyear_1995	=	.1772562	(mean)
		_Iyear_2000	=	.1773906	(mean)
		_Iyear_2005	=	.0058304	(mean)
5._at	:	lndistance	=	8.660738	(mean)
		powerpc_re~t	=	-.0902882	(mean)
		powerpc_se~r	=	1.8	
		s3uni	=	.6597967	(mean)
		lngdppc_re~t	=	7.971586	(mean)
		lngdppc_se~r	=	7.972003	(mean)
		westandrus~y	=	.5842198	(mean)
		dr_at_send~m	=	.3289437	(mean)
		_Iyear_1975	=	.1293737	(mean)
		_Iyear_1980	=	.1343456	(mean)
		_Iyear_1985	=	.1343904	(mean)
		_Iyear_1990	=	.1346368	(mean)
		_Iyear_1995	=	.1772562	(mean)
		_Iyear_2000	=	.1773906	(mean)
		_Iyear_2005	=	.0058304	(mean)
6._at	:	lndistance	=	8.660738	(mean)
		powerpc_re~t	=	-.0902882	(mean)
		powerpc_se~r	=	2.8	
		s3uni	=	.6597967	(mean)
		lngdppc_re~t	=	7.971586	(mean)
		lngdppc_se~r	=	7.972003	(mean)
		westandrus~y	=	.5842198	(mean)
		dr_at_send~m	=	.3289437	(mean)
		_Iyear_1975	=	.1293737	(mean)
		_Iyear_1980	=	.1343456	(mean)
		_Iyear_1985	=	.1343904	(mean)
		_Iyear_1990	=	.1346368	(mean)
		_Iyear_1995	=	.1772562	(mean)
		_Iyear_2000	=	.1773906	(mean)
		_Iyear_2005	=	.0058304	(mean)
7._at	:	lndistance	=	8.660738	(mean)
		powerpc_re~t	=	-.0902882	(mean)
		powerpc_se~r	=	3.8	
		s3uni	=	.6597967	(mean)
		lngdppc_re~t	=	7.971586	(mean)
		lngdppc_se~r	=	7.972003	(mean)
		westandrus~y	=	.5842198	(mean)
		dr_at_send~m	=	.3289437	(mean)
		_Iyear_1975	=	.1293737	(mean)
		_Iyear_1980	=	.1343456	(mean)
		_Iyear_1985	=	.1343904	(mean)
		_Iyear_1990	=	.1346368	(mean)
		_Iyear_1995	=	.1772562	(mean)
		_Iyear_2000	=	.1773906	(mean)
		_Iyear_2005	=	.0058304	(mean)
8._at	:	lndistance	=	8.660738	(mean)
		powerpc_re~t	=	-.0902882	(mean)
		powerpc_se~r	=	4.8	
		s3uni	=	.6597967	(mean)
		lngdppc_re~t	=	7.971586	(mean)
		lngdppc_se~r	=	7.972003	(mean)
		westandrus~y	=	.5842198	(mean)
		dr_at_send~m	=	.3289437	(mean)
		_Iyear_1975	=	.1293737	(mean)
		_Iyear_1980	=	.1343456	(mean)

```

_Iyear_1985 = .1343904 (mean)
_Iyear_1990 = .1346368 (mean)
_Iyear_1995 = .1772562 (mean)
_Iyear_2000 = .1773906 (mean)
_Iyear_2005 = .0058304 (mean)

```

		Delta-method		z	P> z	[95% Conf. Interval]	
		dy/dx	Std. Err.				
s3uni	_at						
	1	-.0170165	.0048844	-3.48	0.000	-.0265896	-.0074433
	2	-.0113918	.0077077	-1.48	0.139	-.0264987	.0037151
	3	.0314365	.0100285	3.13	0.002	.0117811	.051092
	4	.1210499	.0146244	8.28	0.000	.0923867	.1497132
	5	.1832316	.0194604	9.42	0.000	.1450899	.2213734
	6	.1581225	.0174029	9.09	0.000	.1240134	.1922317
	7	.0972056	.0120597	8.06	0.000	.073569	.1208423
	8	.0500627	.007146	7.01	0.000	.0360568	.0640686

```
. margins, dydx(*) atmeans
```

```

Conditional marginal effects      Number of obs   =      133953
Model VCE      : Robust

```

```

Expression   : Pr(dr_at_recipient_dum), predict()
dy/dx w.r.t. : lndistance powerpc_recipient powerpc_sender s3uni lngdppc_recipient lngdppc_sender
               westandruscoldummy dr_at_sender_dum _Iyear_1975 _Iyear_1980 _Iyear_1985 _Iyear_1990
               _Iyear_1995 _Iyear_2000 _Iyear_2005
at           : lndistance      =      8.660738 (mean)
               powerpc_re~t    =     -.0902882 (mean)
               powerpc_se~r    =     -.0892789 (mean)
               s3uni           =     .6597967 (mean)
               lngdppc_re~t    =     7.971586 (mean)
               lngdppc_se~r    =     7.972003 (mean)
               westandrus~y    =     .5842198 (mean)
               dr_at_send~m    =     .3289437 (mean)
               _Iyear_1975     =     .1293737 (mean)
               _Iyear_1980     =     .1343456 (mean)
               _Iyear_1985     =     .1343904 (mean)
               _Iyear_1990     =     .1346368 (mean)
               _Iyear_1995     =     .1772562 (mean)
               _Iyear_2000     =     .1773906 (mean)
               _Iyear_2005     =     .0058304 (mean)

```

		Delta-method		z	P> z	[95% Conf. Interval]	
		dy/dx	Std. Err.				
	lndistance	-.1480632	.0043207	-34.27	0.000	-.1565316	-.1395948
	powerpc_recipient	.1118865	.0040536	27.60	0.000	.1039416	.1198313
	powerpc_sender	.1726754	.0046791	36.90	0.000	.1635045	.1818463
	s3uni	.0395688	.0103114	3.84	0.000	.0193589	.0597787
	lngdppc_recipient	.0319586	.0032398	9.86	0.000	.0256088	.0383084
	lngdppc_sender	.0078713	.0034116	2.31	0.021	.0011847	.0145578
	westandruscoldummy	-.0672739	.0068929	-9.76	0.000	-.0807838	-.0537641
	dr_at_sender_dum	.512752	.0066465	77.15	0.000	.4997251	.5257788
	_Iyear_1975	.0518083	.0061939	8.36	0.000	.0396685	.0639481
	_Iyear_1980	.0900021	.0068519	13.14	0.000	.0765726	.1034317
	_Iyear_1985	-.0220638	.0067525	-3.27	0.001	-.0352984	-.0088292
	_Iyear_1990	-.0244111	.0069571	-3.51	0.000	-.0380468	-.0107754
	_Iyear_1995	-.0840455	.0069051	-12.17	0.000	-.0975793	-.0705117
	_Iyear_2000	-.099332	.0071584	-13.88	0.000	-.1133623	-.0853018
	_Iyear_2005	-.137593	.0192579	-7.14	0.000	-.1753378	-.0998483

```

.
. ** Robustness tests
. * LDV
. capture drop ldr_at_recipient_dum
. gen ldr_at_recipient_dum=1.dr_at_recipient_dum

```

(163836 missing values generated)

```
. xi: logit dr_at_recipient_dum ldr_at_recipient_dum lndistance powerpc_recipient powerpc_sender
s
> 3uni c.s3uni#c.powerpc_recipient c.s3uni#c.powerpc_sender lngdppc_recipient lngdppc_sender
westa
> ndruscoldummy i.year if samedyad==0, cluster( dyadid)
i.year _Iyear_1970-2005 (naturally coded; _Iyear_1970 omitted)
```

```
note: _Iyear_2005 omitted because of collinearity
Iteration 0: log pseudolikelihood = -71396.715
Iteration 1: log pseudolikelihood = -27492.298
Iteration 2: log pseudolikelihood = -24720.346
Iteration 3: log pseudolikelihood = -24467.116
Iteration 4: log pseudolikelihood = -24466.249
Iteration 5: log pseudolikelihood = -24466.248
```

```
Logistic regression                                Number of obs   =    110085
                                                    Wald chi2(16)   =    24135.26
                                                    Prob > chi2     =     0.0000
Log pseudolikelihood = -24466.248                Pseudo R2      =     0.6573
```

(Std. Err. adjusted for 24115 clusters in dyadid)

dr_at_recipient_dum	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
ldr_at_recipient_dum	4.65065	.039307	118.32	0.000	4.573609	4.72769
lndistance	-.913269	.0230731	-39.58	0.000	-.9584915	-.8680465
powerpc_recipient	.7802654	.0395821	19.71	0.000	.7026859	.8578448
powerpc_sender	.7715805	.037238	20.72	0.000	.6985953	.8445656
s3uni	.5800938	.05572	10.41	0.000	.4708847	.689303
c.s3uni#c.powerpc_recipient	.0296414	.0517122	0.57	0.567	-.0717127	.1309954
c.s3uni#c.powerpc_sender	.1779749	.0480495	3.70	0.000	.0837997	.2721501
lngdppc_recipient	.1657659	.0134025	12.37	0.000	.1394974	.1920344
lngdppc_sender	.1633053	.014396	11.34	0.000	.1350896	.1915209
westandruscoldummy	-.0973555	.0292006	-3.33	0.001	-.1545876	-.0401233
_Iyear_1975	1.857042	.1287494	14.42	0.000	1.604698	2.109386
_Iyear_1980	1.562619	.1291723	12.10	0.000	1.309446	1.815792
_Iyear_1985	-1.337229	.1307794	-10.23	0.000	-1.593552	-1.080906
_Iyear_1990	.1956048	.1272483	1.54	0.124	-.0537973	.4450069
_Iyear_1995	-.0343619	.1273706	-0.27	0.787	-.2840037	.2152799
_Iyear_2000	-.2761074	.1258139	-2.19	0.028	-.5226981	-.0295166
_Iyear_2005	0	(omitted)				
_cons	2.129735	.2818086	7.56	0.000	1.5774	2.68207

. estat class

Logistic model for dr_at_recipient_dum

Classified	True		Total
	D	~D	
+	33285	3620	36905
-	5444	67736	73180
Total	38729	71356	110085

Classified + if predicted Pr(D) >= .5
True D defined as dr_at_recipient_dum != 0

Sensitivity	Pr(+ D)	85.94%
Specificity	Pr(- ~D)	94.93%
Positive predictive value	Pr(D +)	90.19%
Negative predictive value	Pr(~D -)	92.56%
False + rate for true ~D	Pr(+ ~D)	5.07%
False - rate for true D	Pr(- D)	14.06%
False + rate for classified +	Pr(~D +)	9.81%
False - rate for classified -	Pr(D -)	7.44%


```

_Iyear_2005      =      .0070945 (mean)

5._at      : ldr_at_rec~m      =      .3375846 (mean)
              lndistance      =      8.668283 (mean)
              powerpc_re~t      =      1.8
              powerpc_se~r      =      -.0530243 (mean)
              s3uni      =      .6837273 (mean)
              lngdppc_re~t      =      7.995519 (mean)
              lngdppc_se~r      =      7.995751 (mean)
              westandrus~y      =      .5776536 (mean)
              _Iyear_1975      =      .1300268 (mean)
              _Iyear_1980      =      .158632 (mean)
              _Iyear_1985      =      .1635282 (mean)
              _Iyear_1990      =      .1613935 (mean)
              _Iyear_1995      =      .1634737 (mean)
              _Iyear_2000      =      .2158514 (mean)
              _Iyear_2005      =      .0070945 (mean)

6._at      : ldr_at_rec~m      =      .3375846 (mean)
              lndistance      =      8.668283 (mean)
              powerpc_re~t      =      2.8
              powerpc_se~r      =      -.0530243 (mean)
              s3uni      =      .6837273 (mean)
              lngdppc_re~t      =      7.995519 (mean)
              lngdppc_se~r      =      7.995751 (mean)
              westandrus~y      =      .5776536 (mean)
              _Iyear_1975      =      .1300268 (mean)
              _Iyear_1980      =      .158632 (mean)
              _Iyear_1985      =      .1635282 (mean)
              _Iyear_1990      =      .1613935 (mean)
              _Iyear_1995      =      .1634737 (mean)
              _Iyear_2000      =      .2158514 (mean)
              _Iyear_2005      =      .0070945 (mean)

7._at      : ldr_at_rec~m      =      .3375846 (mean)
              lndistance      =      8.668283 (mean)
              powerpc_re~t      =      3.8
              powerpc_se~r      =      -.0530243 (mean)
              s3uni      =      .6837273 (mean)
              lngdppc_re~t      =      7.995519 (mean)
              lngdppc_se~r      =      7.995751 (mean)
              westandrus~y      =      .5776536 (mean)
              _Iyear_1975      =      .1300268 (mean)
              _Iyear_1980      =      .158632 (mean)
              _Iyear_1985      =      .1635282 (mean)
              _Iyear_1990      =      .1613935 (mean)
              _Iyear_1995      =      .1634737 (mean)
              _Iyear_2000      =      .2158514 (mean)
              _Iyear_2005      =      .0070945 (mean)

8._at      : ldr_at_rec~m      =      .3375846 (mean)
              lndistance      =      8.668283 (mean)
              powerpc_re~t      =      4.8
              powerpc_se~r      =      -.0530243 (mean)
              s3uni      =      .6837273 (mean)
              lngdppc_re~t      =      7.995519 (mean)
              lngdppc_se~r      =      7.995751 (mean)
              westandrus~y      =      .5776536 (mean)
              _Iyear_1975      =      .1300268 (mean)
              _Iyear_1980      =      .158632 (mean)
              _Iyear_1985      =      .1635282 (mean)
              _Iyear_1990      =      .1613935 (mean)
              _Iyear_1995      =      .1634737 (mean)
              _Iyear_2000      =      .2158514 (mean)
              _Iyear_2005      =      .0070945 (mean)

```

		Delta-method		z	P> z	[95% Conf. Interval]	
		dy/dx	Std. Err.				
s3uni	_at						
	1	.0269111	.0074092	3.63	0.000	.0123893	.041433
	2	.05549	.0096572	5.75	0.000	.0365621	.0744178

3		.0996155	.0104943	9.49	0.000	.0790471	.1201839
4		.1423697	.0146332	9.73	0.000	.1136892	.1710502
5		.1503507	.022832	6.59	0.000	.1056008	.1951007
6		.1171597	.0250303	4.68	0.000	.0681011	.1662182
7		.0724842	.0200706	3.61	0.000	.0331465	.1118219
8		.0389719	.0131746	2.96	0.003	.0131501	.0647937

Conditional marginal effects
Model VCE : Robust

```
Expression      : Pr(dr_at_recipient_dum), predict()
dy/dx w.r.t.   : s3uni
```

```

_Iyear_1985 = .1635282 (mean)
_Iyear_1990 = .1613935 (mean)
_Iyear_1995 = .1634737 (mean)
_Iyear_2000 = .2158514 (mean)
_Iyear_2005 = .0070945 (mean)

5._at : ldr_at_rec~m = .3375846 (mean)
      lndistance = 8.668283 (mean)
      powerpc_re~t = -.054101 (mean)
      powerpc_se~r = 1.8
      s3uni = .6837273 (mean)
      lngdppc_re~t = 7.995519 (mean)
      lngdppc_se~r = 7.995751 (mean)
      westandrus~y = .5776536 (mean)
      _Iyear_1975 = .1300268 (mean)
      _Iyear_1980 = .158632 (mean)
      _Iyear_1985 = .1635282 (mean)
      _Iyear_1990 = .1613935 (mean)
      _Iyear_1995 = .1634737 (mean)
      _Iyear_2000 = .2158514 (mean)
      _Iyear_2005 = .0070945 (mean)

6._at : ldr_at_rec~m = .3375846 (mean)
      lndistance = 8.668283 (mean)
      powerpc_re~t = -.054101 (mean)
      powerpc_se~r = 2.8
      s3uni = .6837273 (mean)
      lngdppc_re~t = 7.995519 (mean)
      lngdppc_se~r = 7.995751 (mean)
      westandrus~y = .5776536 (mean)
      _Iyear_1975 = .1300268 (mean)
      _Iyear_1980 = .158632 (mean)
      _Iyear_1985 = .1635282 (mean)
      _Iyear_1990 = .1613935 (mean)
      _Iyear_1995 = .1634737 (mean)
      _Iyear_2000 = .2158514 (mean)
      _Iyear_2005 = .0070945 (mean)

7._at : ldr_at_rec~m = .3375846 (mean)
      lndistance = 8.668283 (mean)
      powerpc_re~t = -.054101 (mean)
      powerpc_se~r = 3.8
      s3uni = .6837273 (mean)
      lngdppc_re~t = 7.995519 (mean)
      lngdppc_se~r = 7.995751 (mean)
      westandrus~y = .5776536 (mean)
      _Iyear_1975 = .1300268 (mean)
      _Iyear_1980 = .158632 (mean)
      _Iyear_1985 = .1635282 (mean)
      _Iyear_1990 = .1613935 (mean)
      _Iyear_1995 = .1634737 (mean)
      _Iyear_2000 = .2158514 (mean)
      _Iyear_2005 = .0070945 (mean)

8._at : ldr_at_rec~m = .3375846 (mean)
      lndistance = 8.668283 (mean)
      powerpc_re~t = -.054101 (mean)
      powerpc_se~r = 4.8
      s3uni = .6837273 (mean)
      lngdppc_re~t = 7.995519 (mean)
      lngdppc_se~r = 7.995751 (mean)
      westandrus~y = .5776536 (mean)
      _Iyear_1975 = .1300268 (mean)
      _Iyear_1980 = .158632 (mean)
      _Iyear_1985 = .1635282 (mean)
      _Iyear_1990 = .1613935 (mean)
      _Iyear_1995 = .1634737 (mean)
      _Iyear_2000 = .2158514 (mean)
      _Iyear_2005 = .0070945 (mean)

```

```

-----
|                               Delta-method
|                               dy/dx   Std. Err.      z    P>|z|    [95% Conf. Interval]
-----+-----

```


Logistic regression

Number of obs = 133953
Wald chi2(17) = 8218.13
Prob > chi2 = 0.0000
Pseudo R2 = 0.3721

Log pseudolikelihood = -53288.076

(Std. Err. adjusted for 24163 clusters in dyadid)

dr_at_recipient_dum	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
lndistance	-1.224586	.0244819	-50.02	0.000	-1.27257	-1.176603
powerpc_recipient	1.108291	.0530259	20.90	0.000	1.004362	1.212219
powerpc_sender	1.214049	.0553398	21.94	0.000	1.105585	1.322513
s3uni	.4011217	.0558377	7.18	0.000	.2916819	.5105616
c.s3uni#c.powerpc_recipient	.0416182	.0695067	0.60	0.549	-.0946124	.1778489
c.s3uni#c.powerpc_sender	.172817	.0742138	2.33	0.020	.0273606	.3182734
lngdppc_recipient	.220252	.0169846	12.97	0.000	.1869629	.2535411
lngdppc_sender	.0968599	.0179543	5.39	0.000	.0616702	.1320496
westandruscoldummy	-.4308207	.0359747	-11.98	0.000	-.5013299	-.3603115
bilattradegdp_sender	21.75102	3.934998	5.53	0.000	14.03856	29.46347
_Iyear_1975	.4021843	.0259499	15.50	0.000	.3513234	.4530453
_Iyear_1980	.7058513	.0285691	24.71	0.000	.6498569	.7618456
_Iyear_1985	-.247373	.0293802	-8.42	0.000	-.3049572	-.1897888
_Iyear_1990	-.2869394	.0309735	-9.26	0.000	-.3476463	-.2262325
_Iyear_1995	-.7884664	.0317267	-24.85	0.000	-.8506496	-.7262832
_Iyear_2000	-.90924	.033166	-27.41	0.000	-.9742441	-.8442359
_Iyear_2005	-1.257595	.0880603	-14.28	0.000	-1.43019	-1.085
_cons	7.47461	.2987922	25.02	0.000	6.888988	8.060232

Note: 0 failures and 4 successes completely determined.

. estat class

Logistic model for dr_at_recipient_dum

Classified	True		Total
	D	~D	
+	28284	7584	35868
-	15797	82288	98085
Total	44081	89872	133953

Classified + if predicted Pr(D) >= .5
True D defined as dr_at_recipient_dum != 0

Sensitivity	Pr(+ D)	64.16%
Specificity	Pr(- ~D)	91.56%
Positive predictive value	Pr(D +)	78.86%
Negative predictive value	Pr(~D -)	83.89%
False + rate for true ~D	Pr(+ ~D)	8.44%
False - rate for true D	Pr(- D)	35.84%
False + rate for classified +	Pr(~D +)	21.14%
False - rate for classified -	Pr(D -)	16.11%
Correctly classified		82.55%

. margins, dydx(s3uni) at(powerpc_recipient=(-2.2 -1.2 -.2 .8 1.8 2.8 3.8 4.8)) atmeans

Conditional marginal effects

Model VCE : Robust

Number of obs = 133953

Expression : Pr(dr_at_recipient_dum), predict()
dy/dx w.r.t. : s3uni

1._at : lndistance = 8.660738 (mean)
powerpc_re~t = -2.2
powerpc_se~r = -.0892789 (mean)
s3uni = .6597967 (mean)

	lngdppc_re~t	=	7.971586 (mean)
	lngdppc_se~r	=	7.972003 (mean)
	westandrus~y	=	.5842198 (mean)
	bilattrade~r	=	.0022145 (mean)
	_Iyear_1975	=	.1293737 (mean)
	_Iyear_1980	=	.1343456 (mean)
	_Iyear_1985	=	.1343904 (mean)
	_Iyear_1990	=	.1346368 (mean)
	_Iyear_1995	=	.1772562 (mean)
	_Iyear_2000	=	.1773906 (mean)
	_Iyear_2005	=	.0058304 (mean)
2._at	: lndistance	=	8.660738 (mean)
	powerpc_re~t	=	-1.2
	powerpc_se~r	=	-.0892789 (mean)
	s3uni	=	.6597967 (mean)
	lngdppc_re~t	=	7.971586 (mean)
	lngdppc_se~r	=	7.972003 (mean)
	westandrus~y	=	.5842198 (mean)
	bilattrade~r	=	.0022145 (mean)
	_Iyear_1975	=	.1293737 (mean)
	_Iyear_1980	=	.1343456 (mean)
	_Iyear_1985	=	.1343904 (mean)
	_Iyear_1990	=	.1346368 (mean)
	_Iyear_1995	=	.1772562 (mean)
	_Iyear_2000	=	.1773906 (mean)
	_Iyear_2005	=	.0058304 (mean)
3._at	: lndistance	=	8.660738 (mean)
	powerpc_re~t	=	-.2
	powerpc_se~r	=	-.0892789 (mean)
	s3uni	=	.6597967 (mean)
	lngdppc_re~t	=	7.971586 (mean)
	lngdppc_se~r	=	7.972003 (mean)
	westandrus~y	=	.5842198 (mean)
	bilattrade~r	=	.0022145 (mean)
	_Iyear_1975	=	.1293737 (mean)
	_Iyear_1980	=	.1343456 (mean)
	_Iyear_1985	=	.1343904 (mean)
	_Iyear_1990	=	.1346368 (mean)
	_Iyear_1995	=	.1772562 (mean)
	_Iyear_2000	=	.1773906 (mean)
	_Iyear_2005	=	.0058304 (mean)
4._at	: lndistance	=	8.660738 (mean)
	powerpc_re~t	=	.8
	powerpc_se~r	=	-.0892789 (mean)
	s3uni	=	.6597967 (mean)
	lngdppc_re~t	=	7.971586 (mean)
	lngdppc_se~r	=	7.972003 (mean)
	westandrus~y	=	.5842198 (mean)
	bilattrade~r	=	.0022145 (mean)
	_Iyear_1975	=	.1293737 (mean)
	_Iyear_1980	=	.1343456 (mean)
	_Iyear_1985	=	.1343904 (mean)
	_Iyear_1990	=	.1346368 (mean)
	_Iyear_1995	=	.1772562 (mean)
	_Iyear_2000	=	.1773906 (mean)
	_Iyear_2005	=	.0058304 (mean)
5._at	: lndistance	=	8.660738 (mean)
	powerpc_re~t	=	1.8
	powerpc_se~r	=	-.0892789 (mean)
	s3uni	=	.6597967 (mean)
	lngdppc_re~t	=	7.971586 (mean)
	lngdppc_se~r	=	7.972003 (mean)
	westandrus~y	=	.5842198 (mean)
	bilattrade~r	=	.0022145 (mean)
	_Iyear_1975	=	.1293737 (mean)
	_Iyear_1980	=	.1343456 (mean)
	_Iyear_1985	=	.1343904 (mean)
	_Iyear_1990	=	.1346368 (mean)
	_Iyear_1995	=	.1772562 (mean)
	_Iyear_2000	=	.1773906 (mean)

```

_Iyear_2005      =      .0058304 (mean)

6._at      : lndistance      =      8.660738 (mean)
              powerpc_re~t    =      2.8
              powerpc_se~r    =     -.0892789 (mean)
              s3uni           =      .6597967 (mean)
              lngdppc_re~t    =      7.971586 (mean)
              lngdppc_se~r    =      7.972003 (mean)
              westandrus~y    =      .5842198 (mean)
              bilattrade~r    =      .0022145 (mean)
              _Iyear_1975     =      .1293737 (mean)
              _Iyear_1980     =      .1343456 (mean)
              _Iyear_1985     =      .1343904 (mean)
              _Iyear_1990     =      .1346368 (mean)
              _Iyear_1995     =      .1772562 (mean)
              _Iyear_2000     =      .1773906 (mean)
              _Iyear_2005     =      .0058304 (mean)

7._at      : lndistance      =      8.660738 (mean)
              powerpc_re~t    =      3.8
              powerpc_se~r    =     -.0892789 (mean)
              s3uni           =      .6597967 (mean)
              lngdppc_re~t    =      7.971586 (mean)
              lngdppc_se~r    =      7.972003 (mean)
              westandrus~y    =      .5842198 (mean)
              bilattrade~r    =      .0022145 (mean)
              _Iyear_1975     =      .1293737 (mean)
              _Iyear_1980     =      .1343456 (mean)
              _Iyear_1985     =      .1343904 (mean)
              _Iyear_1990     =      .1346368 (mean)
              _Iyear_1995     =      .1772562 (mean)
              _Iyear_2000     =      .1773906 (mean)
              _Iyear_2005     =      .0058304 (mean)

8._at      : lndistance      =      8.660738 (mean)
              powerpc_re~t    =      4.8
              powerpc_se~r    =     -.0892789 (mean)
              s3uni           =      .6597967 (mean)
              lngdppc_re~t    =      7.971586 (mean)
              lngdppc_se~r    =      7.972003 (mean)
              westandrus~y    =      .5842198 (mean)
              bilattrade~r    =      .0022145 (mean)
              _Iyear_1975     =      .1293737 (mean)
              _Iyear_1980     =      .1343456 (mean)
              _Iyear_1985     =      .1343904 (mean)
              _Iyear_1990     =      .1346368 (mean)
              _Iyear_1995     =      .1772562 (mean)
              _Iyear_2000     =      .1773906 (mean)
              _Iyear_2005     =      .0058304 (mean)

```

		Delta-method		z	P> z	[95% Conf. Interval]	
		dy/dx	Std. Err.				
s3uni	_at						
	1	.0092547	.0053474	1.73	0.084	-.0012259	.0197353
	2	.0287969	.0091743	3.14	0.002	.0108156	.0467782
	3	.0699528	.0112141	6.24	0.000	.0479736	.091932
	4	.1047414	.0182614	5.74	0.000	.0689496	.1405331
	5	.0841216	.0235063	3.58	0.000	.0380501	.130193
	6	.042073	.0163479	2.57	0.010	.0100318	.0741142
	7	.0166542	.0081173	2.05	0.040	.0007447	.0325638
	8	.006016	.0034572	1.74	0.082	-.00076	.012792

```
. margins, dydx(s3uni) at(powerpc_sender=(-2.2 -1.2 -.2 .8 1.8 2.8 3.8 4.8)) atmeans
```

```
Conditional marginal effects      Number of obs   =      133953
Model VCE      : Robust
```

```
Expression      : Pr(dr_at_recipient_dum), predict()
dy/dx w.r.t.    : s3uni
```

```

1._at      : lndistance      = 8.660738 (mean)
              powerpc_re~t    = -.0902882 (mean)
              powerpc_se~r     = -2.2
              s3uni            = .6597967 (mean)
              lngdppc_re~t     = 7.971586 (mean)
              lngdppc_se~r     = 7.972003 (mean)
              westandrus~y     = .5842198 (mean)
              bilattrade~r     = .0022145 (mean)
              _Iyear_1975     = .1293737 (mean)
              _Iyear_1980     = .1343456 (mean)
              _Iyear_1985     = .1343904 (mean)
              _Iyear_1990     = .1346368 (mean)
              _Iyear_1995     = .1772562 (mean)
              _Iyear_2000     = .1773906 (mean)
              _Iyear_2005     = .0058304 (mean)

2._at      : lndistance      = 8.660738 (mean)
              powerpc_re~t    = -.0902882 (mean)
              powerpc_se~r     = -1.2
              s3uni            = .6597967 (mean)
              lngdppc_re~t     = 7.971586 (mean)
              lngdppc_se~r     = 7.972003 (mean)
              westandrus~y     = .5842198 (mean)
              bilattrade~r     = .0022145 (mean)
              _Iyear_1975     = .1293737 (mean)
              _Iyear_1980     = .1343456 (mean)
              _Iyear_1985     = .1343904 (mean)
              _Iyear_1990     = .1346368 (mean)
              _Iyear_1995     = .1772562 (mean)
              _Iyear_2000     = .1773906 (mean)
              _Iyear_2005     = .0058304 (mean)

3._at      : lndistance      = 8.660738 (mean)
              powerpc_re~t    = -.0902882 (mean)
              powerpc_se~r     = -.2
              s3uni            = .6597967 (mean)
              lngdppc_re~t     = 7.971586 (mean)
              lngdppc_se~r     = 7.972003 (mean)
              westandrus~y     = .5842198 (mean)
              bilattrade~r     = .0022145 (mean)
              _Iyear_1975     = .1293737 (mean)
              _Iyear_1980     = .1343456 (mean)
              _Iyear_1985     = .1343904 (mean)
              _Iyear_1990     = .1346368 (mean)
              _Iyear_1995     = .1772562 (mean)
              _Iyear_2000     = .1773906 (mean)
              _Iyear_2005     = .0058304 (mean)

4._at      : lndistance      = 8.660738 (mean)
              powerpc_re~t    = -.0902882 (mean)
              powerpc_se~r     = .8
              s3uni            = .6597967 (mean)
              lngdppc_re~t     = 7.971586 (mean)
              lngdppc_se~r     = 7.972003 (mean)
              westandrus~y     = .5842198 (mean)
              bilattrade~r     = .0022145 (mean)
              _Iyear_1975     = .1293737 (mean)
              _Iyear_1980     = .1343456 (mean)
              _Iyear_1985     = .1343904 (mean)
              _Iyear_1990     = .1346368 (mean)
              _Iyear_1995     = .1772562 (mean)
              _Iyear_2000     = .1773906 (mean)
              _Iyear_2005     = .0058304 (mean)

5._at      : lndistance      = 8.660738 (mean)
              powerpc_re~t    = -.0902882 (mean)
              powerpc_se~r     = 1.8
              s3uni            = .6597967 (mean)
              lngdppc_re~t     = 7.971586 (mean)
              lngdppc_se~r     = 7.972003 (mean)
              westandrus~y     = .5842198 (mean)
              bilattrade~r     = .0022145 (mean)
              _Iyear_1975     = .1293737 (mean)
              _Iyear_1980     = .1343456 (mean)

```

```

_Iyear_1985 = .1343904 (mean)
_Iyear_1990 = .1346368 (mean)
_Iyear_1995 = .1772562 (mean)
_Iyear_2000 = .1773906 (mean)
_Iyear_2005 = .0058304 (mean)

6._at : lndistance = 8.660738 (mean)
       powerpc_re~t = -.0902882 (mean)
       powerpc_se~r = 2.8
       s3uni = .6597967 (mean)
       lngdppc_re~t = 7.971586 (mean)
       lngdppc_se~r = 7.972003 (mean)
       westandrus~y = .5842198 (mean)
       bilattrade~r = .0022145 (mean)
       _Iyear_1975 = .1293737 (mean)
       _Iyear_1980 = .1343456 (mean)
       _Iyear_1985 = .1343904 (mean)
       _Iyear_1990 = .1346368 (mean)
       _Iyear_1995 = .1772562 (mean)
       _Iyear_2000 = .1773906 (mean)
       _Iyear_2005 = .0058304 (mean)

7._at : lndistance = 8.660738 (mean)
       powerpc_re~t = -.0902882 (mean)
       powerpc_se~r = 3.8
       s3uni = .6597967 (mean)
       lngdppc_re~t = 7.971586 (mean)
       lngdppc_se~r = 7.972003 (mean)
       westandrus~y = .5842198 (mean)
       bilattrade~r = .0022145 (mean)
       _Iyear_1975 = .1293737 (mean)
       _Iyear_1980 = .1343456 (mean)
       _Iyear_1985 = .1343904 (mean)
       _Iyear_1990 = .1346368 (mean)
       _Iyear_1995 = .1772562 (mean)
       _Iyear_2000 = .1773906 (mean)
       _Iyear_2005 = .0058304 (mean)

8._at : lndistance = 8.660738 (mean)
       powerpc_re~t = -.0902882 (mean)
       powerpc_se~r = 4.8
       s3uni = .6597967 (mean)
       lngdppc_re~t = 7.971586 (mean)
       lngdppc_se~r = 7.972003 (mean)
       westandrus~y = .5842198 (mean)
       bilattrade~r = .0022145 (mean)
       _Iyear_1975 = .1293737 (mean)
       _Iyear_1980 = .1343456 (mean)
       _Iyear_1985 = .1343904 (mean)
       _Iyear_1990 = .1346368 (mean)
       _Iyear_1995 = .1772562 (mean)
       _Iyear_2000 = .1773906 (mean)
       _Iyear_2005 = .0058304 (mean)

```

		Delta-method		z	P> z	[95% Conf. Interval]	
		dy/dx	Std. Err.				
s3uni	_at						
	1	.0003675	.003891	0.09	0.925	-.0072588	.0079937
	2	.0136404	.0081133	1.68	0.093	-.0022615	.0295422
	3	.0664831	.0111562	5.96	0.000	.0446174	.0883488
	4	.132773	.0184921	7.18	0.000	.0965292	.1690169
	5	.1048271	.0200045	5.24	0.000	.065619	.1440351
	6	.0459396	.0109199	4.21	0.000	.024537	.0673423
	7	.0158176	.0043584	3.63	0.000	.0072753	.0243599
	8	.0050022	.0015337	3.26	0.001	.0019962	.0080083

. margins, dydx(*) atmeans

Conditional marginal effects
Model VCE : Robust

Number of obs = 133953


```

Expression : Pr(dr_at_recipient_dum), predict()
dy/dx w.r.t. : lndistance powerpc_recipient powerpc_sender s3uni lngdppc_recipient lngdppc_sender
               westandruscoldummy bilattradegdp_sender _Iyear_1975 _Iyear_1980 _Iyear_1985 _Iyear_1990
               _Iyear_1995 _Iyear_2000 _Iyear_2005
at          : lndistance      = 8.660738 (mean)
               powerpc_re~t   = -.0902882 (mean)
               powerpc_se~r   = -.0892789 (mean)
               s3uni          = .6597967 (mean)
               lngdppc_re~t   = 7.971586 (mean)
               lngdppc_se~r   = 7.972003 (mean)
               westandrus~y   = .5842198 (mean)
               bilattrade~r   = .0022145 (mean)
               _Iyear_1975    = .1293737 (mean)
               _Iyear_1980    = .1343456 (mean)
               _Iyear_1985    = .1343904 (mean)
               _Iyear_1990    = .1346368 (mean)
               _Iyear_1995    = .1772562 (mean)
               _Iyear_2000    = .1773906 (mean)
               _Iyear_2005    = .0058304 (mean)

```

	Delta-method					
	dy/dx	Std. Err.	z	P> z	[95% Conf. Interval]	
lndistance	-.2411387	.0049478	-48.74	0.000	-.2508363	-.2314412
powerpc_recipient	.2236456	.0048512	46.10	0.000	.2141374	.2331538
powerpc_sender	.2615168	.0054234	48.22	0.000	.2508871	.2721465
s3uni	.0752086	.0114591	6.56	0.000	.0527492	.0976679
lngdppc_recipient	.0433708	.0033031	13.13	0.000	.0368969	.0498447
lngdppc_sender	.0190731	.0035236	5.41	0.000	.0121671	.0259791
westandruscoldummy	-.0848348	.0070649	-12.01	0.000	-.0986818	-.0709878
bilattradegdp_sender	4.283089	.7846546	5.46	0.000	2.745194	5.820984
_Iyear_1975	.0791959	.0051488	15.38	0.000	.0691044	.0892874
_Iyear_1980	.1389923	.0057241	24.28	0.000	.1277732	.1502114
_Iyear_1985	-.0487113	.0057172	-8.52	0.000	-.0599168	-.0375058
_Iyear_1990	-.0565025	.0060235	-9.38	0.000	-.0683084	-.0446967
_Iyear_1995	-.1552604	.0061334	-25.31	0.000	-.1672816	-.1432392
_Iyear_2000	-.1790425	.0064499	-27.76	0.000	-.1916841	-.1664009
_Iyear_2005	-.2476387	.0174142	-14.22	0.000	-.2817698	-.2135076

```

.
. * Include year of independence
. xi: logit dr_at_recipient_dum lndistance powerpc_recipient powerpc_sender s3uni
. s3uni#c.powe
> rpc_recipient c.s3uni#c.powerpc_sender lngdppc_recipient lngdppc_sender westandruscoldummy
indep
> endence_sender c.independence_sender#c.independence_sender i.year if samedyad==0, cluster( dyadid)
i.year      _Iyear_1970-2005      (naturally coded; _Iyear_1970 omitted)

Iteration 0:  log pseudolikelihood = -84862.419
Iteration 1:  log pseudolikelihood = -54035.416
Iteration 2:  log pseudolikelihood = -52876.273
Iteration 3:  log pseudolikelihood = -52869.167
Iteration 4:  log pseudolikelihood = -52869.164

```

```

Logistic regression                                Number of obs   =    133953
                                                    Wald chi2(18)   =    8231.92
                                                    Prob > chi2     =    0.0000
Log pseudolikelihood = -52869.164                Pseudo R2      =    0.3770

```

(Std. Err. adjusted for 24163 clusters in dyadid)

	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
dr_at_recipient_dum						
lndistance	-1.311022	.0252518	-51.92	0.000	-1.360514	-1.261529
powerpc_recipient	1.185687	.0534076	22.20	0.000	1.08101	1.290364
powerpc_sender	1.197978	.0560892	21.36	0.000	1.088045	1.307911
s3uni	.3278904	.0574855	5.70	0.000	.2152208	.44056
c.s3uni#c.powerpc_recipient	.009326	.0706049	0.13	0.895	-.1290571	.1477091

c.s3uni#c.powerpc_sender	.0902761	.0754628	1.20	0.232	-.0576282	.2381804
lngdppc_recipient	.2296719	.0170238	13.49	0.000	.1963059	.2630378
lngdppc_sender	.1635083	.0181421	9.01	0.000	.1279504	.1990662
westandruscoldummy	-.043035	.0479579	-0.90	0.370	-.1370307	.0509606
independence_sender	.4611461	.0283756	16.25	0.000	.4055309	.5167613
c.independence_sender#						
c.independence_sender	-.0001224	7.50e-06	-16.33	0.000	-.0001371	-.0001077
_Iyear_1975	.4469623	.026113	17.12	0.000	.3957817	.4981428
_Iyear_1980	.7538434	.0288674	26.11	0.000	.6972643	.8104224
_Iyear_1985	-.2194699	.0297513	-7.38	0.000	-.2777814	-.1611583
_Iyear_1990	-.250168	.031439	-7.96	0.000	-.3117873	-.1885487
_Iyear_1995	-.6831294	.0322703	-21.17	0.000	-.7463781	-.6198807
_Iyear_2000	-.8051631	.0336386	-23.94	0.000	-.8710936	-.7392325
_Iyear_2005	-.9578077	.0953079	-10.05	0.000	-1.144608	-.7710078
_cons	-426.2299	26.80274	-15.90	0.000	-478.7623	-373.6975

. estat class

Logistic model for dr_at_recipient_dum

Classified	True		Total
	D	~D	
+	28530	7763	36293
-	15551	82109	97660
Total	44081	89872	133953

Classified + if predicted Pr(D) >= .5

True D defined as dr_at_recipient_dum != 0

Sensitivity	Pr(+ D)	64.72%
Specificity	Pr(- ~D)	91.36%
Positive predictive value	Pr(D +)	78.61%
Negative predictive value	Pr(~D -)	84.08%
False + rate for true ~D	Pr(+ ~D)	8.64%
False - rate for true D	Pr(- D)	35.28%
False + rate for classified +	Pr(~D +)	21.39%
False - rate for classified -	Pr(D -)	15.92%
Correctly classified		82.60%

. margins, dydx(s3uni) at(powerpc_recipient=(-2.2 -1.2 -.2 .8 1.8 2.8 3.8 4.8)) atmeans

Conditional marginal effects

Number of obs = 133953

Model VCE : Robust

Expression : Pr(dr_at_recipient_dum), predict()

dy/dx w.r.t. : s3uni

1._at	: lndistance	=	8.660738 (mean)
	powerpc_re~t	=	-2.2
	powerpc_se~r	=	-.0892789 (mean)
	s3uni	=	.6597967 (mean)
	lngdppc_re~t	=	7.971586 (mean)
	lngdppc_se~r	=	7.972003 (mean)
	westandrus~y	=	.5842198 (mean)
	independen~r	=	1933.644 (mean)
	_Iyear_1975	=	.1293737 (mean)
	_Iyear_1980	=	.1343456 (mean)
	_Iyear_1985	=	.1343904 (mean)
	_Iyear_1990	=	.1346368 (mean)
	_Iyear_1995	=	.1772562 (mean)
	_Iyear_2000	=	.1773906 (mean)
	_Iyear_2005	=	.0058304 (mean)
2._at	: lndistance	=	8.660738 (mean)
	powerpc_re~t	=	-1.2

	powerpc_se~r	=	-.0892789	(mean)
	s3uni	=	.6597967	(mean)
	lngdppc_re~t	=	7.971586	(mean)
	lngdppc_se~r	=	7.972003	(mean)
	westandrus~y	=	.5842198	(mean)
	independen~r	=	1933.644	(mean)
	_Iyear_1975	=	.1293737	(mean)
	_Iyear_1980	=	.1343456	(mean)
	_Iyear_1985	=	.1343904	(mean)
	_Iyear_1990	=	.1346368	(mean)
	_Iyear_1995	=	.1772562	(mean)
	_Iyear_2000	=	.1773906	(mean)
	_Iyear_2005	=	.0058304	(mean)
3._at	: lndistance	=	8.660738	(mean)
	powerpc_re~t	=	-.2	
	powerpc_se~r	=	-.0892789	(mean)
	s3uni	=	.6597967	(mean)
	lngdppc_re~t	=	7.971586	(mean)
	lngdppc_se~r	=	7.972003	(mean)
	westandrus~y	=	.5842198	(mean)
	independen~r	=	1933.644	(mean)
	_Iyear_1975	=	.1293737	(mean)
	_Iyear_1980	=	.1343456	(mean)
	_Iyear_1985	=	.1343904	(mean)
	_Iyear_1990	=	.1346368	(mean)
	_Iyear_1995	=	.1772562	(mean)
	_Iyear_2000	=	.1773906	(mean)
	_Iyear_2005	=	.0058304	(mean)
4._at	: lndistance	=	8.660738	(mean)
	powerpc_re~t	=	.8	
	powerpc_se~r	=	-.0892789	(mean)
	s3uni	=	.6597967	(mean)
	lngdppc_re~t	=	7.971586	(mean)
	lngdppc_se~r	=	7.972003	(mean)
	westandrus~y	=	.5842198	(mean)
	independen~r	=	1933.644	(mean)
	_Iyear_1975	=	.1293737	(mean)
	_Iyear_1980	=	.1343456	(mean)
	_Iyear_1985	=	.1343904	(mean)
	_Iyear_1990	=	.1346368	(mean)
	_Iyear_1995	=	.1772562	(mean)
	_Iyear_2000	=	.1773906	(mean)
	_Iyear_2005	=	.0058304	(mean)
5._at	: lndistance	=	8.660738	(mean)
	powerpc_re~t	=	1.8	
	powerpc_se~r	=	-.0892789	(mean)
	s3uni	=	.6597967	(mean)
	lngdppc_re~t	=	7.971586	(mean)
	lngdppc_se~r	=	7.972003	(mean)
	westandrus~y	=	.5842198	(mean)
	independen~r	=	1933.644	(mean)
	_Iyear_1975	=	.1293737	(mean)
	_Iyear_1980	=	.1343456	(mean)
	_Iyear_1985	=	.1343904	(mean)
	_Iyear_1990	=	.1346368	(mean)
	_Iyear_1995	=	.1772562	(mean)
	_Iyear_2000	=	.1773906	(mean)
	_Iyear_2005	=	.0058304	(mean)
6._at	: lndistance	=	8.660738	(mean)
	powerpc_re~t	=	2.8	
	powerpc_se~r	=	-.0892789	(mean)
	s3uni	=	.6597967	(mean)
	lngdppc_re~t	=	7.971586	(mean)
	lngdppc_se~r	=	7.972003	(mean)
	westandrus~y	=	.5842198	(mean)
	independen~r	=	1933.644	(mean)
	_Iyear_1975	=	.1293737	(mean)
	_Iyear_1980	=	.1343456	(mean)
	_Iyear_1985	=	.1343904	(mean)
	_Iyear_1990	=	.1346368	(mean)

```

_Iyear_1995 = .1772562 (mean)
_Iyear_2000 = .1773906 (mean)
_Iyear_2005 = .0058304 (mean)

7._at : lndistance = 8.660738 (mean)
       powerpc_re~t = 3.8
       powerpc_se~r = -.0892789 (mean)
       s3uni = .6597967 (mean)
       lngdppc_re~t = 7.971586 (mean)
       lngdppc_se~r = 7.972003 (mean)
       westandrus~y = .5842198 (mean)
       independen~r = 1933.644 (mean)
       _Iyear_1975 = .1293737 (mean)
       _Iyear_1980 = .1343456 (mean)
       _Iyear_1985 = .1343904 (mean)
       _Iyear_1990 = .1346368 (mean)
       _Iyear_1995 = .1772562 (mean)
       _Iyear_2000 = .1773906 (mean)
       _Iyear_2005 = .0058304 (mean)

8._at : lndistance = 8.660738 (mean)
       powerpc_re~t = 4.8
       powerpc_se~r = -.0892789 (mean)
       s3uni = .6597967 (mean)
       lngdppc_re~t = 7.971586 (mean)
       lngdppc_se~r = 7.972003 (mean)
       westandrus~y = .5842198 (mean)
       independen~r = 1933.644 (mean)
       _Iyear_1975 = .1293737 (mean)
       _Iyear_1980 = .1343456 (mean)
       _Iyear_1985 = .1343904 (mean)
       _Iyear_1990 = .1346368 (mean)
       _Iyear_1995 = .1772562 (mean)
       _Iyear_2000 = .1773906 (mean)
       _Iyear_2005 = .0058304 (mean)

```

		Delta-method		z	P> z	[95% Conf. Interval]	
		dy/dx	Std. Err.				
s3uni	_at						
	1	.0104666	.0060962	1.72	0.086	-.0014818	.022415
	2	.0302913	.0108259	2.80	0.005	.009073	.0515096
	3	.0654604	.0128576	5.09	0.000	.0402601	.0906608
	4	.0800548	.0180481	4.44	0.000	.0446812	.1154284
	5	.0505889	.0195599	2.59	0.010	.0122523	.0889256
	6	.0207762	.0118161	1.76	0.079	-.0023829	.0439353
	7	.0071012	.0053184	1.34	0.182	-.0033226	.017525
	8	.0022773	.0021012	1.08	0.278	-.0018411	.0063956

```
. margins, dydx(s3uni) at(powerpc_sender=(-2.2 -1.2 -.2 .8 1.8 2.8 3.8 4.8)) atmeans
```

```
Conditional marginal effects      Number of obs   =    133953
Model VCE      : Robust
```

```
Expression      : Pr(dr_at_recipient_dum), predict()
dy/dx w.r.t.    : s3uni
```

```

1._at : lndistance = 8.660738 (mean)
       powerpc_re~t = -.0902882 (mean)
       powerpc_se~r = -2.2
       s3uni = .6597967 (mean)
       lngdppc_re~t = 7.971586 (mean)
       lngdppc_se~r = 7.972003 (mean)
       westandrus~y = .5842198 (mean)
       independen~r = 1933.644 (mean)
       _Iyear_1975 = .1293737 (mean)
       _Iyear_1980 = .1343456 (mean)
       _Iyear_1985 = .1343904 (mean)
       _Iyear_1990 = .1346368 (mean)
       _Iyear_1995 = .1772562 (mean)
       _Iyear_2000 = .1773906 (mean)

```

		_Iyear_2005	=	.0058304 (mean)
2._at	:	lndistance	=	8.660738 (mean)
		powerpc_re~t	=	-.0902882 (mean)
		powerpc_se~r	=	-1.2
		s3uni	=	.6597967 (mean)
		lngdppc_re~t	=	7.971586 (mean)
		lngdppc_se~r	=	7.972003 (mean)
		westandrus~y	=	.5842198 (mean)
		independen~r	=	1933.644 (mean)
		_Iyear_1975	=	.1293737 (mean)
		_Iyear_1980	=	.1343456 (mean)
		_Iyear_1985	=	.1343904 (mean)
		_Iyear_1990	=	.1346368 (mean)
		_Iyear_1995	=	.1772562 (mean)
		_Iyear_2000	=	.1773906 (mean)
		_Iyear_2005	=	.0058304 (mean)
3._at	:	lndistance	=	8.660738 (mean)
		powerpc_re~t	=	-.0902882 (mean)
		powerpc_se~r	=	-.2
		s3uni	=	.6597967 (mean)
		lngdppc_re~t	=	7.971586 (mean)
		lngdppc_se~r	=	7.972003 (mean)
		westandrus~y	=	.5842198 (mean)
		independen~r	=	1933.644 (mean)
		_Iyear_1975	=	.1293737 (mean)
		_Iyear_1980	=	.1343456 (mean)
		_Iyear_1985	=	.1343904 (mean)
		_Iyear_1990	=	.1346368 (mean)
		_Iyear_1995	=	.1772562 (mean)
		_Iyear_2000	=	.1773906 (mean)
		_Iyear_2005	=	.0058304 (mean)
4._at	:	lndistance	=	8.660738 (mean)
		powerpc_re~t	=	-.0902882 (mean)
		powerpc_se~r	=	.8
		s3uni	=	.6597967 (mean)
		lngdppc_re~t	=	7.971586 (mean)
		lngdppc_se~r	=	7.972003 (mean)
		westandrus~y	=	.5842198 (mean)
		independen~r	=	1933.644 (mean)
		_Iyear_1975	=	.1293737 (mean)
		_Iyear_1980	=	.1343456 (mean)
		_Iyear_1985	=	.1343904 (mean)
		_Iyear_1990	=	.1346368 (mean)
		_Iyear_1995	=	.1772562 (mean)
		_Iyear_2000	=	.1773906 (mean)
		_Iyear_2005	=	.0058304 (mean)
5._at	:	lndistance	=	8.660738 (mean)
		powerpc_re~t	=	-.0902882 (mean)
		powerpc_se~r	=	1.8
		s3uni	=	.6597967 (mean)
		lngdppc_re~t	=	7.971586 (mean)
		lngdppc_se~r	=	7.972003 (mean)
		westandrus~y	=	.5842198 (mean)
		independen~r	=	1933.644 (mean)
		_Iyear_1975	=	.1293737 (mean)
		_Iyear_1980	=	.1343456 (mean)
		_Iyear_1985	=	.1343904 (mean)
		_Iyear_1990	=	.1346368 (mean)
		_Iyear_1995	=	.1772562 (mean)
		_Iyear_2000	=	.1773906 (mean)
		_Iyear_2005	=	.0058304 (mean)
6._at	:	lndistance	=	8.660738 (mean)
		powerpc_re~t	=	-.0902882 (mean)
		powerpc_se~r	=	2.8
		s3uni	=	.6597967 (mean)
		lngdppc_re~t	=	7.971586 (mean)
		lngdppc_se~r	=	7.972003 (mean)
		westandrus~y	=	.5842198 (mean)
		independen~r	=	1933.644 (mean)

```

_Iyear_1975 = .1293737 (mean)
_Iyear_1980 = .1343456 (mean)
_Iyear_1985 = .1343904 (mean)
_Iyear_1990 = .1346368 (mean)
_Iyear_1995 = .1772562 (mean)
_Iyear_2000 = .1773906 (mean)
_Iyear_2005 = .0058304 (mean)

7._at : lndistance = 8.660738 (mean)
       powerpc_re~t = -.0902882 (mean)
       powerpc_se~r = 3.8
       s3uni = .6597967 (mean)
       lngdppc_re~t = 7.971586 (mean)
       lngdppc_se~r = 7.972003 (mean)
       westandrus~y = .5842198 (mean)
       independen~r = 1933.644 (mean)
       _Iyear_1975 = .1293737 (mean)
       _Iyear_1980 = .1343456 (mean)
       _Iyear_1985 = .1343904 (mean)
       _Iyear_1990 = .1346368 (mean)
       _Iyear_1995 = .1772562 (mean)
       _Iyear_2000 = .1773906 (mean)
       _Iyear_2005 = .0058304 (mean)

8._at : lndistance = 8.660738 (mean)
       powerpc_re~t = -.0902882 (mean)
       powerpc_se~r = 4.8
       s3uni = .6597967 (mean)
       lngdppc_re~t = 7.971586 (mean)
       lngdppc_se~r = 7.972003 (mean)
       westandrus~y = .5842198 (mean)
       independen~r = 1933.644 (mean)
       _Iyear_1975 = .1293737 (mean)
       _Iyear_1980 = .1343456 (mean)
       _Iyear_1985 = .1343904 (mean)
       _Iyear_1990 = .1346368 (mean)
       _Iyear_1995 = .1772562 (mean)
       _Iyear_2000 = .1773906 (mean)
       _Iyear_2005 = .0058304 (mean)

```

		Delta-method		z	P> z	[95% Conf. Interval]	
		dy/dx	Std. Err.				
s3uni	_at						
	1	.0039424	.0057018	0.69	0.489	-.0072329	.0151176
	2	.0202494	.0107506	1.88	0.060	-.0008215	.0413202
	3	.0633862	.0128852	4.92	0.000	.0381317	.0886407
	4	.0967651	.0183609	5.27	0.000	.0607784	.1327517
	5	.0679258	.0190341	3.57	0.000	.0306198	.1052319
	6	.029483	.0106576	2.77	0.006	.0085946	.0503715
	7	.0104821	.0044717	2.34	0.019	.0017177	.0192465
	8	.0034605	.0016582	2.09	0.037	.0002105	.0067105

```

. margins, dydx(independence_sender) at(independence_sender=(1816 1850 1900 1925 1950 1
> 970 1990)) atmeans

```

```

Conditional marginal effects      Number of obs   =      133953
Model VCE      : Robust

```

```

Expression      : Pr(dr_at_recipient_dum), predict()
dy/dx w.r.t.    : independence_sender

```

```

1._at : lndistance = 8.660738 (mean)
       powerpc_re~t = -.0902882 (mean)
       powerpc_se~r = -.0892789 (mean)
       s3uni = .6597967 (mean)
       lngdppc_re~t = 7.971586 (mean)
       lngdppc_se~r = 7.972003 (mean)
       westandrus~y = .5842198 (mean)
       independen~r = 1816
       _Iyear_1975 = .1293737 (mean)

```

		_Iyear_1980	=	.1343456	(mean)
		_Iyear_1985	=	.1343904	(mean)
		_Iyear_1990	=	.1346368	(mean)
		_Iyear_1995	=	.1772562	(mean)
		_Iyear_2000	=	.1773906	(mean)
		_Iyear_2005	=	.0058304	(mean)
2._at	:	lndistance	=	8.660738	(mean)
		powerpc_re~t	=	-.0902882	(mean)
		powerpc_se~r	=	-.0892789	(mean)
		s3uni	=	.6597967	(mean)
		lngdppc_re~t	=	7.971586	(mean)
		lngdppc_se~r	=	7.972003	(mean)
		westandrus~y	=	.5842198	(mean)
		independen~r	=	1850	
		_Iyear_1975	=	.1293737	(mean)
		_Iyear_1980	=	.1343456	(mean)
		_Iyear_1985	=	.1343904	(mean)
		_Iyear_1990	=	.1346368	(mean)
		_Iyear_1995	=	.1772562	(mean)
		_Iyear_2000	=	.1773906	(mean)
		_Iyear_2005	=	.0058304	(mean)
3._at	:	lndistance	=	8.660738	(mean)
		powerpc_re~t	=	-.0902882	(mean)
		powerpc_se~r	=	-.0892789	(mean)
		s3uni	=	.6597967	(mean)
		lngdppc_re~t	=	7.971586	(mean)
		lngdppc_se~r	=	7.972003	(mean)
		westandrus~y	=	.5842198	(mean)
		independen~r	=	1900	
		_Iyear_1975	=	.1293737	(mean)
		_Iyear_1980	=	.1343456	(mean)
		_Iyear_1985	=	.1343904	(mean)
		_Iyear_1990	=	.1346368	(mean)
		_Iyear_1995	=	.1772562	(mean)
		_Iyear_2000	=	.1773906	(mean)
		_Iyear_2005	=	.0058304	(mean)
4._at	:	lndistance	=	8.660738	(mean)
		powerpc_re~t	=	-.0902882	(mean)
		powerpc_se~r	=	-.0892789	(mean)
		s3uni	=	.6597967	(mean)
		lngdppc_re~t	=	7.971586	(mean)
		lngdppc_se~r	=	7.972003	(mean)
		westandrus~y	=	.5842198	(mean)
		independen~r	=	1925	
		_Iyear_1975	=	.1293737	(mean)
		_Iyear_1980	=	.1343456	(mean)
		_Iyear_1985	=	.1343904	(mean)
		_Iyear_1990	=	.1346368	(mean)
		_Iyear_1995	=	.1772562	(mean)
		_Iyear_2000	=	.1773906	(mean)
		_Iyear_2005	=	.0058304	(mean)
5._at	:	lndistance	=	8.660738	(mean)
		powerpc_re~t	=	-.0902882	(mean)
		powerpc_se~r	=	-.0892789	(mean)
		s3uni	=	.6597967	(mean)
		lngdppc_re~t	=	7.971586	(mean)
		lngdppc_se~r	=	7.972003	(mean)
		westandrus~y	=	.5842198	(mean)
		independen~r	=	1950	
		_Iyear_1975	=	.1293737	(mean)
		_Iyear_1980	=	.1343456	(mean)
		_Iyear_1985	=	.1343904	(mean)
		_Iyear_1990	=	.1346368	(mean)
		_Iyear_1995	=	.1772562	(mean)
		_Iyear_2000	=	.1773906	(mean)
		_Iyear_2005	=	.0058304	(mean)
6._at	:	lndistance	=	8.660738	(mean)
		powerpc_re~t	=	-.0902882	(mean)
		powerpc_se~r	=	-.0892789	(mean)

```

s3uni          = .6597967 (mean)
lngdppc_re~t   = 7.971586 (mean)
lngdppc_se~r   = 7.972003 (mean)
westandrus~y   = .5842198 (mean)
independen~r   = 1970
_Iyear_1975    = .1293737 (mean)
_Iyear_1980    = .1343456 (mean)
_Iyear_1985    = .1343904 (mean)
_Iyear_1990    = .1346368 (mean)
_Iyear_1995    = .1772562 (mean)
_Iyear_2000    = .1773906 (mean)
_Iyear_2005    = .0058304 (mean)

7._at          : lndistance      = 8.660738 (mean)
                 powerpc_re~t    = -.0902882 (mean)
                 powerpc_se~r    = -.0892789 (mean)
                 s3uni           = .6597967 (mean)
                 lngdppc_re~t    = 7.971586 (mean)
                 lngdppc_se~r    = 7.972003 (mean)
                 westandrus~y    = .5842198 (mean)
                 independen~r    = 1990
                 _Iyear_1975     = .1293737 (mean)
                 _Iyear_1980     = .1343456 (mean)
                 _Iyear_1985     = .1343904 (mean)
                 _Iyear_1990     = .1346368 (mean)
                 _Iyear_1995     = .1772562 (mean)
                 _Iyear_2000     = .1773906 (mean)
                 _Iyear_2005     = .0058304 (mean)

```

		Delta-method		z	P> z	[95% Conf. Interval]	
		dy/dx	Std. Err.				
independence_sender							
	_at						
	1	.0032257	.0002048	15.75	0.000	.0028243	.0036271
	2	.0018633	.0001718	10.85	0.000	.0015265	.0022
	3	-.0009736	.0001082	-9.00	0.000	-.0011856	-.0007617
	4	-.0022978	.0001602	-14.34	0.000	-.0026118	-.0019838
	5	-.0032194	.0001936	-16.63	0.000	-.0035988	-.00284
	6	-.0034236	.0001634	-20.95	0.000	-.0037439	-.0031033
	7	-.0030706	.0000857	-35.82	0.000	-.0032387	-.0029026

```
. margins, dydx(*) atmeans
```

```

Conditional marginal effects      Number of obs   =      133953
Model VCE      : Robust

```

```

Expression      : Pr(dr_at_recipient_dum), predict()
dy/dx w.r.t.    : lndistance powerpc_recipient powerpc_sender s3uni lngdppc_recipient lngdppc_sender
                  westandruscoldummy independence_sender _Iyear_1975 _Iyear_1980 _Iyear_1985 _Iyear_1990
                  _Iyear_1995 _Iyear_2000 _Iyear_2005
at              : lndistance      = 8.660738 (mean)
                  powerpc_re~t    = -.0902882 (mean)
                  powerpc_se~r    = -.0892789 (mean)
                  s3uni           = .6597967 (mean)
                  lngdppc_re~t    = 7.971586 (mean)
                  lngdppc_se~r    = 7.972003 (mean)
                  westandrus~y    = .5842198 (mean)
                  independen~r    = 1933.644 (mean)
                  _Iyear_1975     = .1293737 (mean)
                  _Iyear_1980     = .1343456 (mean)
                  _Iyear_1985     = .1343904 (mean)
                  _Iyear_1990     = .1346368 (mean)
                  _Iyear_1995     = .1772562 (mean)
                  _Iyear_2000     = .1773906 (mean)
                  _Iyear_2005     = .0058304 (mean)

```

		Delta-method		z	P> z	[95% Conf. Interval]	
		dy/dx	Std. Err.				
lndistance		-.2841259	.0062802	-45.24	0.000	-.2964348	-.271817

powerpc_recipient	.2582967	.0057367	45.03	0.000	.2470531	.2695404
powerpc_sender	.2725357	.0059987	45.43	0.000	.2607786	.2842929
s3uni	.0691315	.0129903	5.32	0.000	.043671	.0945921
lngdppc_recipient	.0497747	.0036587	13.60	0.000	.0426038	.0569456
lngdppc_sender	.0354357	.0039727	8.92	0.000	.0276493	.043222
westandruscoldummy	-.0093266	.0103668	-0.90	0.368	-.0296451	.0109919
independence_sender	-.0026807	.0001778	-15.07	0.000	-.0030292	-.0023321
_Iyear_1975	.0968661	.0057733	16.78	0.000	.0855506	.1081816
_Iyear_1980	.1633737	.0064864	25.19	0.000	.1506606	.1760868
_Iyear_1985	-.0475637	.0063862	-7.45	0.000	-.0600805	-.035047
_Iyear_1990	-.0542167	.0067397	-8.04	0.000	-.0674263	-.041007
_Iyear_1995	-.1480485	.0068319	-21.67	0.000	-.1614388	-.1346581
_Iyear_2000	-.1744957	.0071673	-24.35	0.000	-.1885433	-.1604481
_Iyear_2005	-.207577	.020525	-10.11	0.000	-.2478052	-.1673489

```

.
.
. * Include regime type dyad dummies
. xi: logit dr_at_recipient_dum lndistance powerpc_recipient powerpc_sender s3uni
c.s3uni#c.powe
> rpc_recipient c.s3uni#c.powerpc_sender lngdppc_recipient lngdppc_sender westandruscoldummy
demde
> m autocautoc i.year if samedyad==0, cluster( dyadid)
i.year          _Iyear_1970-2005      (naturally coded; _Iyear_1970 omitted)

```

```

Iteration 0:  log pseudolikelihood = -80179.527
Iteration 1:  log pseudolikelihood =  -51434.7
Iteration 2:  log pseudolikelihood = -50577.112
Iteration 3:  log pseudolikelihood = -50573.739
Iteration 4:  log pseudolikelihood = -50573.739

```

Logistic regression	Number of obs	=	124922
	Wald chi2(18)	=	8284.14
	Prob > chi2	=	0.0000
Log pseudolikelihood = -50573.739	Pseudo R2	=	0.3692

(Std. Err. adjusted for 22796 clusters in dyadid)

dr_at_recipient_dum	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
lndistance	-1.271516	.0240026	-52.97	0.000	-1.318561	-1.224472
powerpc_recipient	1.173461	.0571776	20.52	0.000	1.061395	1.285527
powerpc_sender	1.189089	.0563589	21.10	0.000	1.078627	1.29955
s3uni	.3311806	.0575155	5.76	0.000	.2184523	.443909
c.s3uni#c.powerpc_recipient	.008587	.076552	0.11	0.911	-.1414522	.1586263
c.s3uni#c.powerpc_sender	.2068571	.0761471	2.72	0.007	.0576114	.3561027
lngdppc_recipient	.2125628	.0176719	12.03	0.000	.1779264	.2471991
lngdppc_sender	.1018713	.0180507	5.64	0.000	.0664925	.13725
westandruscoldummy	-.3973915	.0365842	-10.86	0.000	-.4690952	-.3256879
demdem	.292785	.0329938	8.87	0.000	.2281183	.3574516
autocautoc	.0097074	.0309643	0.31	0.754	-.0509816	.0703965
_Iyear_1975	.4197745	.0265462	15.81	0.000	.367745	.471804
_Iyear_1980	.7360613	.0290846	25.31	0.000	.6790566	.793066
_Iyear_1985	-.251211	.0303967	-8.26	0.000	-.3107874	-.1916345
_Iyear_1990	-.3268901	.0332232	-9.84	0.000	-.3920063	-.2617738
_Iyear_1995	-.8558903	.0343506	-24.92	0.000	-.9232162	-.7885643
_Iyear_2000	-1.000162	.0360382	-27.75	0.000	-1.070796	-.9295288
_Iyear_2005	-1.250238	.0936378	-13.35	0.000	-1.433764	-1.066711
_cons	7.925415	.3059105	25.91	0.000	7.325841	8.524988

```
. estat class
```

```
Logistic model for dr_at_recipient_dum
```

Classified	True		Total
	D	~D	
+	27710	7444	35154

-	14915	74853	89768
Total	42625	82297	124922

```
. margins, dydx(s3uni) at(powerpc_recipient=(-2.2 -1.2 -.2 .8 1.8 2.8 3.8 4.8)) atmeans
```

```
Expression      : Pr(dr_at_recipient_dum), predict()
dy/dx w.r.t.   : s3uni
```

		_Iyear_1990	=	.1338515	(mean)
		_Iyear_1995	=	.1732761	(mean)
		_Iyear_2000	=	.1734122	(mean)
		_Iyear_2005	=	.0053714	(mean)
4._at	:	lndistance	=	8.669839	(mean)
		powerpc_re~t	=	.8	
		powerpc_se~r	=	-.0476449	(mean)
		s3uni	=	.6546165	(mean)
		lngdppc_re~t	=	7.988308	(mean)
		lngdppc_se~r	=	7.988818	(mean)
		westandrus~y	=	.5690831	(mean)
		demdem	=	.1760619	(mean)
		autocautoc	=	.36863	(mean)
		_Iyear_1975	=	.1324747	(mean)
		_Iyear_1980	=	.1335393	(mean)
		_Iyear_1985	=	.1335794	(mean)
		_Iyear_1990	=	.1338515	(mean)
		_Iyear_1995	=	.1732761	(mean)
		_Iyear_2000	=	.1734122	(mean)
		_Iyear_2005	=	.0053714	(mean)
5._at	:	lndistance	=	8.669839	(mean)
		powerpc_re~t	=	1.8	
		powerpc_se~r	=	-.0476449	(mean)
		s3uni	=	.6546165	(mean)
		lngdppc_re~t	=	7.988308	(mean)
		lngdppc_se~r	=	7.988818	(mean)
		westandrus~y	=	.5690831	(mean)
		demdem	=	.1760619	(mean)
		autocautoc	=	.36863	(mean)
		_Iyear_1975	=	.1324747	(mean)
		_Iyear_1980	=	.1335393	(mean)
		_Iyear_1985	=	.1335794	(mean)
		_Iyear_1990	=	.1338515	(mean)
		_Iyear_1995	=	.1732761	(mean)
		_Iyear_2000	=	.1734122	(mean)
		_Iyear_2005	=	.0053714	(mean)
6._at	:	lndistance	=	8.669839	(mean)
		powerpc_re~t	=	2.8	
		powerpc_se~r	=	-.0476449	(mean)
		s3uni	=	.6546165	(mean)
		lngdppc_re~t	=	7.988308	(mean)
		lngdppc_se~r	=	7.988818	(mean)
		westandrus~y	=	.5690831	(mean)
		demdem	=	.1760619	(mean)
		autocautoc	=	.36863	(mean)
		_Iyear_1975	=	.1324747	(mean)
		_Iyear_1980	=	.1335393	(mean)
		_Iyear_1985	=	.1335794	(mean)
		_Iyear_1990	=	.1338515	(mean)
		_Iyear_1995	=	.1732761	(mean)
		_Iyear_2000	=	.1734122	(mean)
		_Iyear_2005	=	.0053714	(mean)
7._at	:	lndistance	=	8.669839	(mean)
		powerpc_re~t	=	3.8	
		powerpc_se~r	=	-.0476449	(mean)
		s3uni	=	.6546165	(mean)
		lngdppc_re~t	=	7.988308	(mean)
		lngdppc_se~r	=	7.988818	(mean)
		westandrus~y	=	.5690831	(mean)
		demdem	=	.1760619	(mean)
		autocautoc	=	.36863	(mean)
		_Iyear_1975	=	.1324747	(mean)
		_Iyear_1980	=	.1335393	(mean)
		_Iyear_1985	=	.1335794	(mean)
		_Iyear_1990	=	.1338515	(mean)
		_Iyear_1995	=	.1732761	(mean)
		_Iyear_2000	=	.1734122	(mean)
		_Iyear_2005	=	.0053714	(mean)
8._at	:	lndistance	=	8.669839	(mean)

```

powerpc_re~t      =      4.8
powerpc_se~r      =    -.0476449 (mean)
s3uni              =    .6546165 (mean)
lngdppc_re~t      =    7.988308 (mean)
lngdppc_se~r      =    7.988818 (mean)
westandrus~y      =    .5690831 (mean)
demdem            =    .1760619 (mean)
autocautoc        =    .36863 (mean)
_Iyear_1975       =    .1324747 (mean)
_Iyear_1980       =    .1335393 (mean)
_Iyear_1985       =    .1335794 (mean)
_Iyear_1990       =    .1338515 (mean)
_Iyear_1995       =    .1732761 (mean)
_Iyear_2000       =    .1734122 (mean)
_Iyear_2005       =    .0053714 (mean)

```

		Delta-method				
		dy/dx	Std. Err.	z	P> z	[95% Conf. Interval]
s3uni	_at					
	1	.0090212	.0055388	1.63	0.103	-.0018347 .0198772
	2	.0263818	.0097933	2.69	0.007	.0071873 .0455763
	3	.0601364	.0117089	5.14	0.000	.0371874 .0830855
	4	.0818919	.0192163	4.26	0.000	.0442285 .1195552
	5	.0577626	.0240204	2.40	0.016	.0106834 .1048417
	6	.0253487	.0156317	1.62	0.105	-.0052889 .0559863
	7	.0089515	.0072972	1.23	0.220	-.0053508 .0232539
	8	.0029259	.0029461	0.99	0.321	-.0028482 .0087001

```

. margins, dydx(s3uni) at(powerpc_sender=(-2.2 -1.2 -.2 .8 1.8 2.8 3.8 4.8)) atmeans

```

```

Conditional marginal effects      Number of obs   =    124922
Model VCE      : Robust

```

```

Expression      : Pr(dr_at_recipient_dum), predict()
dy/dx w.r.t.    : s3uni

```

```

1._at      : lndistance      =    8.669839 (mean)
              powerpc_re~t    =   -.0489247 (mean)
              powerpc_se~r    =         -2.2
              s3uni           =    .6546165 (mean)
              lngdppc_re~t    =    7.988308 (mean)
              lngdppc_se~r    =    7.988818 (mean)
              westandrus~y    =    .5690831 (mean)
              demdem          =    .1760619 (mean)
              autocautoc      =    .36863 (mean)
              _Iyear_1975     =    .1324747 (mean)
              _Iyear_1980     =    .1335393 (mean)
              _Iyear_1985     =    .1335794 (mean)
              _Iyear_1990     =    .1338515 (mean)
              _Iyear_1995     =    .1732761 (mean)
              _Iyear_2000     =    .1734122 (mean)
              _Iyear_2005     =    .0053714 (mean)

```

```

2._at      : lndistance      =    8.669839 (mean)
              powerpc_re~t    =   -.0489247 (mean)
              powerpc_se~r    =         -1.2
              s3uni           =    .6546165 (mean)
              lngdppc_re~t    =    7.988308 (mean)
              lngdppc_se~r    =    7.988818 (mean)
              westandrus~y    =    .5690831 (mean)
              demdem          =    .1760619 (mean)
              autocautoc      =    .36863 (mean)
              _Iyear_1975     =    .1324747 (mean)
              _Iyear_1980     =    .1335393 (mean)
              _Iyear_1985     =    .1335794 (mean)
              _Iyear_1990     =    .1338515 (mean)
              _Iyear_1995     =    .1732761 (mean)
              _Iyear_2000     =    .1734122 (mean)
              _Iyear_2005     =    .0053714 (mean)

```

```

3._at      : lndistance      =      8.669839 (mean)
              powerpc_re~t    =     -.0489247 (mean)
              powerpc_se~r    =             -.2
              s3uni           =      .6546165 (mean)
              lngdppc_re~t    =      7.988308 (mean)
              lngdppc_se~r    =      7.988818 (mean)
              westandrus~y    =      .5690831 (mean)
              demdem          =      .1760619 (mean)
              autocautoc      =       .36863 (mean)
              _Iyear_1975     =      .1324747 (mean)
              _Iyear_1980     =      .1335393 (mean)
              _Iyear_1985     =      .1335794 (mean)
              _Iyear_1990     =      .1338515 (mean)
              _Iyear_1995     =      .1732761 (mean)
              _Iyear_2000     =      .1734122 (mean)
              _Iyear_2005     =      .0053714 (mean)

4._at      : lndistance      =      8.669839 (mean)
              powerpc_re~t    =     -.0489247 (mean)
              powerpc_se~r    =             .8
              s3uni           =      .6546165 (mean)
              lngdppc_re~t    =      7.988308 (mean)
              lngdppc_se~r    =      7.988818 (mean)
              westandrus~y    =      .5690831 (mean)
              demdem          =      .1760619 (mean)
              autocautoc      =       .36863 (mean)
              _Iyear_1975     =      .1324747 (mean)
              _Iyear_1980     =      .1335393 (mean)
              _Iyear_1985     =      .1335794 (mean)
              _Iyear_1990     =      .1338515 (mean)
              _Iyear_1995     =      .1732761 (mean)
              _Iyear_2000     =      .1734122 (mean)
              _Iyear_2005     =      .0053714 (mean)

5._at      : lndistance      =      8.669839 (mean)
              powerpc_re~t    =     -.0489247 (mean)
              powerpc_se~r    =             1.8
              s3uni           =      .6546165 (mean)
              lngdppc_re~t    =      7.988308 (mean)
              lngdppc_se~r    =      7.988818 (mean)
              westandrus~y    =      .5690831 (mean)
              demdem          =      .1760619 (mean)
              autocautoc      =       .36863 (mean)
              _Iyear_1975     =      .1324747 (mean)
              _Iyear_1980     =      .1335393 (mean)
              _Iyear_1985     =      .1335794 (mean)
              _Iyear_1990     =      .1338515 (mean)
              _Iyear_1995     =      .1732761 (mean)
              _Iyear_2000     =      .1734122 (mean)
              _Iyear_2005     =      .0053714 (mean)

6._at      : lndistance      =      8.669839 (mean)
              powerpc_re~t    =     -.0489247 (mean)
              powerpc_se~r    =             2.8
              s3uni           =      .6546165 (mean)
              lngdppc_re~t    =      7.988308 (mean)
              lngdppc_se~r    =      7.988818 (mean)
              westandrus~y    =      .5690831 (mean)
              demdem          =      .1760619 (mean)
              autocautoc      =       .36863 (mean)
              _Iyear_1975     =      .1324747 (mean)
              _Iyear_1980     =      .1335393 (mean)
              _Iyear_1985     =      .1335794 (mean)
              _Iyear_1990     =      .1338515 (mean)
              _Iyear_1995     =      .1732761 (mean)
              _Iyear_2000     =      .1734122 (mean)
              _Iyear_2005     =      .0053714 (mean)

7._at      : lndistance      =      8.669839 (mean)
              powerpc_re~t    =     -.0489247 (mean)
              powerpc_se~r    =             3.8
              s3uni           =      .6546165 (mean)
              lngdppc_re~t    =      7.988308 (mean)
              lngdppc_se~r    =      7.988818 (mean)

```

	westandrus~y	=	.5690831	(mean)
	demdcm	=	.1760619	(mean)
	autocautoc	=	.36863	(mean)
	_Iyear_1975	=	.1324747	(mean)
	_Iyear_1980	=	.1335393	(mean)
	_Iyear_1985	=	.1335794	(mean)
	_Iyear_1990	=	.1338515	(mean)
	_Iyear_1995	=	.1732761	(mean)
	_Iyear_2000	=	.1734122	(mean)
	_Iyear_2005	=	.0053714	(mean)
8._at	: lndistance	=	8.669839	(mean)
	powerpc_re~t	=	-.0489247	(mean)
	powerpc_se~r	=	4.8	
	s3uni	=	.6546165	(mean)
	lndppc_re~t	=	7.988308	(mean)
	lndppc_se~r	=	7.988818	(mean)
	westandrus~y	=	.5690831	(mean)
	demdcm	=	.1760619	(mean)
	autocautoc	=	.36863	(mean)
	_Iyear_1975	=	.1324747	(mean)
	_Iyear_1980	=	.1335393	(mean)
	_Iyear_1985	=	.1335794	(mean)
	_Iyear_1990	=	.1338515	(mean)
	_Iyear_1995	=	.1732761	(mean)
	_Iyear_2000	=	.1734122	(mean)
	_Iyear_2005	=	.0053714	(mean)

		Delta-method		z	P> z	[95% Conf. Interval]
		dy/dx	Std. Err.			
s3uni						
	_at					
	1	-.0027533	.0041591	-0.66	0.508	-.0109051 .0053985
	2	.0060876	.0086088	0.71	0.479	-.0107855 .0229606
	3	.0538079	.0116076	4.64	0.000	.0310573 .0765584
	4	.1227135	.0187687	6.54	0.000	.0859275 .1594995
	5	.1026247	.0201318	5.10	0.000	.0631671 .1420823
	6	.0466929	.0109972	4.25	0.000	.0251388 .068247
	7	.0165306	.004421	3.74	0.000	.0078656 .0251956
	8	.0053408	.0015708	3.40	0.001	.0022621 .0084194

```
. margins, dydx(*) atmeans
```

Conditional marginal effects
Model VCE : Robust

Number of obs = 124922

```
Expression      : Pr(dr_at_recipient_dum), predict()
```

```

dy/dx w.r.t. : lndistance powerpc_recipient powerpc_sender s3uni lngdppc_recipient lngdppc_sender
westandruscoldummy demdem autocautoc _Iyear_1975 _Iyear_1980 _Iyear_1985 _Iyear_1990
_Iyear_1995 _Iyear_2000 _Iyear_2005

```

```

at      : lndistance      =      8.669839 (mean)
        powerpc_re~t      =     -0.0489247 (mean)
        powerpc_se~r      =     -0.0476449 (mean)
        s3uni             =     0.6546165 (mean)
        lngdppc_re~t      =     7.988308 (mean)
        lngdppc_se~r      =     7.988818 (mean)
        westandrus~y      =     0.5690831 (mean)
        demdem            =     0.1760619 (mean)
        autocautoc        =     0.36863 (mean)
        _Iyear_1975       =     0.1324747 (mean)
        _Iyear_1980       =     0.1335393 (mean)
        _Iyear_1985       =     0.1335794 (mean)
        _Iyear_1990       =     0.1338515 (mean)
        _Iyear_1995       =     0.1732761 (mean)
        _Iyear_2000       =     0.1734122 (mean)
        Iyear_2005        =     0.0053714 (mean)

```

	Delta-method				
	dy/dx	Std. Err.	z	P> z	[95% Conf. Interval]

lndistance	-.259807	.0051078	-50.87	0.000	-.269818	-.249796
powerpc_recipient	.24092	.0053263	45.23	0.000	.2304806	.2513594
powerpc_sender	.2706332	.0058304	46.42	0.000	.2592058	.2820606
s3uni	.06557	.0120005	5.46	0.000	.0420494	.0890906
lngdppc_recipient	.0434326	.0035835	12.12	0.000	.0364092	.0504561
lngdppc_sender	.0208152	.0036815	5.65	0.000	.0135996	.0280308
westandruscoldummy	-.0811984	.0074563	-10.89	0.000	-.0958125	-.0665843
demdem	.0598243	.0067626	8.85	0.000	.0465699	.0730787
autocautoc	.0019835	.0063285	0.31	0.754	-.0104201	.0143871
_Iyear_1975	.0857719	.0054827	15.64	0.000	.0750259	.0965178
_Iyear_1980	.1503983	.006062	24.81	0.000	.138517	.1622796
_Iyear_1985	-.0513296	.0061405	-8.36	0.000	-.0633647	-.0392944
_Iyear_1990	-.066793	.0066965	-9.97	0.000	-.0799179	-.053668
_Iyear_1995	-.1748828	.0068835	-25.41	0.000	-.1883741	-.1613914
_Iyear_2000	-.2043616	.0072599	-28.15	0.000	-.2185908	-.1901325
_Iyear_2005	-.2554592	.0192219	-13.29	0.000	-.2931334	-.2177849

```

.
.
. * Divide into Cold War and post-Cold War period
. xi: logit dr_at_recipient_dum lndistance powerpc_recipient powerpc_sender s3uni
c.s3uni#c.powe
> rpc_recipient c.s3uni#c.powerpc_sender lngdppc_recipient lngdppc_sender westandruscoldummy
i.year
> if samedyad==0 & year<1990, cluster( dyadid)
i.year _Iyear_1970-2005 (naturally coded; _Iyear_1970 omitted)

```

```

note: _Iyear_1990 omitted because of collinearity
note: _Iyear_1995 omitted because of collinearity
note: _Iyear_2000 omitted because of collinearity
note: _Iyear_2005 omitted because of collinearity
Iteration 0: log pseudolikelihood = -44330.277
Iteration 1: log pseudolikelihood = -29513.709
Iteration 2: log pseudolikelihood = -29170.784
Iteration 3: log pseudolikelihood = -29170.135
Iteration 4: log pseudolikelihood = -29170.135

```

Logistic regression	Number of obs	=	67631
	Wald chi2(12)	=	5928.88
	Prob > chi2	=	0.0000
Log pseudolikelihood = -29170.135	Pseudo R2	=	0.3420

(Std. Err. adjusted for 18084 clusters in dyadid)

dr_at_recipient_dum	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]
lndistance	-1.220204	.0280188	-43.55	0.000	-1.27512 -1.165288
powerpc_recipient	.8957283	.0449783	19.91	0.000	.8075724 .9838842
powerpc_sender	.9766701	.0474034	20.60	0.000	.8837612 1.069579
s3uni	.3933671	.0561611	7.00	0.000	.2832934 .5034409
c.s3uni#c.powerpc_recipient	.1738273	.0611093	2.84	0.004	.0540553 .2935994
c.s3uni#c.powerpc_sender	.3730958	.0643397	5.80	0.000	.2469924 .4991992
lngdppc_recipient	.3202132	.0183345	17.47	0.000	.2842781 .3561482
lngdppc_sender	.1806607	.0193187	9.35	0.000	.1427966 .2185247
westandruscoldummy	-.3623082	.0392195	-9.24	0.000	-.4391769 -.2854394
_Iyear_1975	.3873405	.0249537	15.52	0.000	.3384322 .4362487
_Iyear_1980	.6846831	.0274635	24.93	0.000	.6308556 .7385105
_Iyear_1985	-.2345459	.0281256	-8.34	0.000	-.2896711 -.1794208
_Iyear_1990	0 (omitted)				
_Iyear_1995	0 (omitted)				
_Iyear_2000	0 (omitted)				
_Iyear_2005	0 (omitted)				
_cons	5.97395	.3216406	18.57	0.000	5.343546 6.604354

```
. estat class
```

```
Logistic model for dr_at_recipient_dum
```


		_Iyear_2000	=	0 (mean)
		_Iyear_2005	=	0 (mean)
4._at	:	lndistance	=	8.68815 (mean)
		powerpc_re~t	=	.8
		powerpc_se~r	=	-.1428588 (mean)
		s3uni	=	.6248045 (mean)
		lngdppc_re~t	=	7.915577 (mean)
		lngdppc_se~r	=	7.916054 (mean)
		westandrus~y	=	.5590927 (mean)
		_Iyear_1975	=	.2562434 (mean)
		_Iyear_1980	=	.266091 (mean)
		_Iyear_1985	=	.2661797 (mean)
		_Iyear_1990	=	0 (mean)
		_Iyear_1995	=	0 (mean)
		_Iyear_2000	=	0 (mean)
		_Iyear_2005	=	0 (mean)
5._at	:	lndistance	=	8.68815 (mean)
		powerpc_re~t	=	1.8
		powerpc_se~r	=	-.1428588 (mean)
		s3uni	=	.6248045 (mean)
		lngdppc_re~t	=	7.915577 (mean)
		lngdppc_se~r	=	7.916054 (mean)
		westandrus~y	=	.5590927 (mean)
		_Iyear_1975	=	.2562434 (mean)
		_Iyear_1980	=	.266091 (mean)
		_Iyear_1985	=	.2661797 (mean)
		_Iyear_1990	=	0 (mean)
		_Iyear_1995	=	0 (mean)
		_Iyear_2000	=	0 (mean)
		_Iyear_2005	=	0 (mean)
6._at	:	lndistance	=	8.68815 (mean)
		powerpc_re~t	=	2.8
		powerpc_se~r	=	-.1428588 (mean)
		s3uni	=	.6248045 (mean)
		lngdppc_re~t	=	7.915577 (mean)
		lngdppc_se~r	=	7.916054 (mean)
		westandrus~y	=	.5590927 (mean)
		_Iyear_1975	=	.2562434 (mean)
		_Iyear_1980	=	.266091 (mean)
		_Iyear_1985	=	.2661797 (mean)
		_Iyear_1990	=	0 (mean)
		_Iyear_1995	=	0 (mean)
		_Iyear_2000	=	0 (mean)
		_Iyear_2005	=	0 (mean)
7._at	:	lndistance	=	8.68815 (mean)
		powerpc_re~t	=	3.8
		powerpc_se~r	=	-.1428588 (mean)
		s3uni	=	.6248045 (mean)
		lngdppc_re~t	=	7.915577 (mean)
		lngdppc_se~r	=	7.916054 (mean)
		westandrus~y	=	.5590927 (mean)
		_Iyear_1975	=	.2562434 (mean)
		_Iyear_1980	=	.266091 (mean)
		_Iyear_1985	=	.2661797 (mean)
		_Iyear_1990	=	0 (mean)
		_Iyear_1995	=	0 (mean)
		_Iyear_2000	=	0 (mean)
		_Iyear_2005	=	0 (mean)
8._at	:	lndistance	=	8.68815 (mean)
		powerpc_re~t	=	4.8
		powerpc_se~r	=	-.1428588 (mean)
		s3uni	=	.6248045 (mean)
		lngdppc_re~t	=	7.915577 (mean)
		lngdppc_se~r	=	7.916054 (mean)
		westandrus~y	=	.5590927 (mean)
		_Iyear_1975	=	.2562434 (mean)
		_Iyear_1980	=	.266091 (mean)
		_Iyear_1985	=	.2661797 (mean)
		_Iyear_1990	=	0 (mean)

```

_Iyear_1995 = 0 (mean)
_Iyear_2000 = 0 (mean)
_Iyear_2005 = 0 (mean)

```

		Delta-method		z	P> z	[95% Conf. Interval]	
		dy/dx	Std. Err.				
s3uni							
	_at						
	1	-.0023239	.0081395	-0.29	0.775	-.0182771	.0136292
	2	.0162531	.0116481	1.40	0.163	-.0065769	.039083
	3	.0659446	.0126232	5.22	0.000	.0412035	.0906857
	4	.1182081	.018014	6.56	0.000	.0829014	.1535148
	5	.1139931	.0209444	5.44	0.000	.0729429	.1550433
	6	.0719558	.0155495	4.63	0.000	.0414795	.1024322
	7	.0361792	.0088567	4.08	0.000	.0188204	.053538
	8	.0163253	.0044075	3.70	0.000	.0076867	.0249638

. margins, dydx(s3uni) at(powerpc_sender=(-2.2 -1.2 -.2 .8 1.8 2.8 3.8 4.8)) atmeans

```

Conditional marginal effects      Number of obs   =      67631
Model VCE      : Robust

```

```

Expression      : Pr(dr_at_recipient_dum), predict()
dy/dx w.r.t.    : s3uni

```

```

1._at      : lndistance      =      8.68815 (mean)
              powerpc_re~t    =     -.1438045 (mean)
              powerpc_se~r     =             -2.2
              s3uni            =     .6248045 (mean)
              lngdppc_re~t     =     7.915577 (mean)
              lngdppc_se~r     =     7.916054 (mean)
              westandrus~y     =     .5590927 (mean)
              _Iyear_1975      =     .2562434 (mean)
              _Iyear_1980      =     .266091 (mean)
              _Iyear_1985      =     .2661797 (mean)
              _Iyear_1990      =             0 (mean)
              _Iyear_1995      =             0 (mean)
              _Iyear_2000      =             0 (mean)
              _Iyear_2005      =             0 (mean)

```

```

2._at      : lndistance      =      8.68815 (mean)
              powerpc_re~t    =     -.1438045 (mean)
              powerpc_se~r     =             -1.2
              s3uni            =     .6248045 (mean)
              lngdppc_re~t     =     7.915577 (mean)
              lngdppc_se~r     =     7.916054 (mean)
              westandrus~y     =     .5590927 (mean)
              _Iyear_1975      =     .2562434 (mean)
              _Iyear_1980      =     .266091 (mean)
              _Iyear_1985      =     .2661797 (mean)
              _Iyear_1990      =             0 (mean)
              _Iyear_1995      =             0 (mean)
              _Iyear_2000      =             0 (mean)
              _Iyear_2005      =             0 (mean)

```

```

3._at      : lndistance      =      8.68815 (mean)
              powerpc_re~t    =     -.1438045 (mean)
              powerpc_se~r     =             -.2
              s3uni            =     .6248045 (mean)
              lngdppc_re~t     =     7.915577 (mean)
              lngdppc_se~r     =     7.916054 (mean)
              westandrus~y     =     .5590927 (mean)
              _Iyear_1975      =     .2562434 (mean)
              _Iyear_1980      =     .266091 (mean)
              _Iyear_1985      =     .2661797 (mean)
              _Iyear_1990      =             0 (mean)
              _Iyear_1995      =             0 (mean)
              _Iyear_2000      =             0 (mean)
              _Iyear_2005      =             0 (mean)

```

```

4._at      : lndistance      =      8.68815 (mean)

```

	powerpc_re~t	=	-.1438045 (mean)
	powerpc_se~r	=	.8
	s3uni	=	.6248045 (mean)
	lngdppc_re~t	=	7.915577 (mean)
	lngdppc_se~r	=	7.916054 (mean)
	westandrus~y	=	.5590927 (mean)
	_Iyear_1975	=	.2562434 (mean)
	_Iyear_1980	=	.266091 (mean)
	_Iyear_1985	=	.2661797 (mean)
	_Iyear_1990	=	0 (mean)
	_Iyear_1995	=	0 (mean)
	_Iyear_2000	=	0 (mean)
	_Iyear_2005	=	0 (mean)
5._at	: lndistance	=	8.68815 (mean)
	powerpc_re~t	=	-.1438045 (mean)
	powerpc_se~r	=	1.8
	s3uni	=	.6248045 (mean)
	lngdppc_re~t	=	7.915577 (mean)
	lngdppc_se~r	=	7.916054 (mean)
	westandrus~y	=	.5590927 (mean)
	_Iyear_1975	=	.2562434 (mean)
	_Iyear_1980	=	.266091 (mean)
	_Iyear_1985	=	.2661797 (mean)
	_Iyear_1990	=	0 (mean)
	_Iyear_1995	=	0 (mean)
	_Iyear_2000	=	0 (mean)
	_Iyear_2005	=	0 (mean)
6._at	: lndistance	=	8.68815 (mean)
	powerpc_re~t	=	-.1438045 (mean)
	powerpc_se~r	=	2.8
	s3uni	=	.6248045 (mean)
	lngdppc_re~t	=	7.915577 (mean)
	lngdppc_se~r	=	7.916054 (mean)
	westandrus~y	=	.5590927 (mean)
	_Iyear_1975	=	.2562434 (mean)
	_Iyear_1980	=	.266091 (mean)
	_Iyear_1985	=	.2661797 (mean)
	_Iyear_1990	=	0 (mean)
	_Iyear_1995	=	0 (mean)
	_Iyear_2000	=	0 (mean)
	_Iyear_2005	=	0 (mean)
7._at	: lndistance	=	8.68815 (mean)
	powerpc_re~t	=	-.1438045 (mean)
	powerpc_se~r	=	3.8
	s3uni	=	.6248045 (mean)
	lngdppc_re~t	=	7.915577 (mean)
	lngdppc_se~r	=	7.916054 (mean)
	westandrus~y	=	.5590927 (mean)
	_Iyear_1975	=	.2562434 (mean)
	_Iyear_1980	=	.266091 (mean)
	_Iyear_1985	=	.2661797 (mean)
	_Iyear_1990	=	0 (mean)
	_Iyear_1995	=	0 (mean)
	_Iyear_2000	=	0 (mean)
	_Iyear_2005	=	0 (mean)
8._at	: lndistance	=	8.68815 (mean)
	powerpc_re~t	=	-.1438045 (mean)
	powerpc_se~r	=	4.8
	s3uni	=	.6248045 (mean)
	lngdppc_re~t	=	7.915577 (mean)
	lngdppc_se~r	=	7.916054 (mean)
	westandrus~y	=	.5590927 (mean)
	_Iyear_1975	=	.2562434 (mean)
	_Iyear_1980	=	.266091 (mean)
	_Iyear_1985	=	.2661797 (mean)
	_Iyear_1990	=	0 (mean)
	_Iyear_1995	=	0 (mean)
	_Iyear_2000	=	0 (mean)
	_Iyear_2005	=	0 (mean)

		Delta-method		z	P> z	[95% Conf. Interval]
		dy/dx	Std. Err.			
s3uni						
	_at					
	1	-.0169275	.0059018	-2.87	0.004	-.0284949 -.0053602
	2	-.0083528	.0103511	-0.81	0.420	-.0286407 .011935
	3	.0631512	.0125902	5.02	0.000	.038475 .0878275
	4	.1594696	.0175863	9.07	0.000	.1250012 .1939381
	5	.142191	.0170098	8.36	0.000	.1088523 .1755296
	6	.0735239	.0103614	7.10	0.000	.0532159 .0938319
	7	.0299927	.0049509	6.06	0.000	.0202892 .0396963
	8	.0110955	.0021011	5.28	0.000	.0069774 .0152136

Logistic regression

Log pseudolikelihood = -23979.332

dr_at_recipient_dum	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
lndistance	-1.299104	.0267468	-48.57	0.000	-1.351527	-1.24668
powerpc_recipient	1.776817	.1232959	14.41	0.000	1.535162	2.018473
powerpc_sender	1.630297	.1083116	15.05	0.000	1.41801	1.842584
s3uni	.4903048	.0890072	5.51	0.000	.3158538	.6647558
c.s3uni#c.powerpc_recipient	-.527389	.16002	-3.30	0.001	-.8410224	-.2137555
c.s3uni#c.powerpc_sender	-.2369826	.1427846	-1.66	0.097	-.5168352	.04287
lngdppc_recipient	.1193597	.0211748	5.64	0.000	.0778579	.1608616
lmgdppc_sender	.0386026	.0215664	1.79	0.073	-.0036667	.080872
westandruscoldummy	-.5029995	.0427075	-11.78	0.000	-.5867047	-.4192944
_Iyear_1975	0	(omitted)				
_Iyear_1980	0	(omitted)				
_Iyear_1985	0	(omitted)				
_Iyear_1990	.9179591	.087165	10.53	0.000	.7471189	1.088799
_Iyear_1995	.4112592	.0857598	4.80	0.000	.2431732	.5793452
_Iyear_2000	.2878814	.0847876	3.40	0.001	.1217008	.4540621
_Iyear_2005	0	(omitted)				
_cons	8.137794	.3724982	21.85	0.000	7.407711	8.867877

Logistic model for dr at recipient dum

Classified	True		Total
	D	~D	
+	12444	3292	15736
-	7045	43541	50586
Total	19489	46833	66322

Sensitivity	$\Pr(+ D)$	63.85%
Specificity	$\Pr(- \sim D)$	92.97%
Positive predictive value	$\Pr(D +)$	79.08%
Negative predictive value	$\Pr(\sim D -)$	86.07%
False + rate for true $\sim D$	$\Pr(+ \sim D)$	7.03%
False - rate for true D	$\Pr(- D)$	36.15%
False + rate for classified +	$\Pr(\sim D +)$	20.92%
False - rate for classified -	$\Pr(D -)$	13.93%
Correctly classified		84.41%

Conditional marginal effects
Model VCE : Robust

Number of obs = 66322

```
Expression      : Pr(dr_at_recipient_dum), predict()
dy/dx w.r.t.   : s3uni
```

```
1. at      : lndistance      =      8.632785 (mean)
```

		powerpc_re~t	=	-2.2	
		powerpc_se~r	=	-.0346414	(mean)
		s3uni	=	.6954796	(mean)
		lngdppc_re~t	=	8.028701	(mean)
		lngdppc_se~r	=	8.029056	(mean)
		westandrus~y	=	.6098429	(mean)
		_Iyear_1975	=	0	(mean)
		_Iyear_1980	=	0	(mean)
		_Iyear_1985	=	0	(mean)
		_Iyear_1990	=	.2719309	(mean)
		_Iyear_1995	=	.3580109	(mean)
		_Iyear_2000	=	.3582823	(mean)
		_Iyear_2005	=	.0117759	(mean)
2._at	:	lndistance	=	8.632785	(mean)
		powerpc_re~t	=	-1.2	
		powerpc_se~r	=	-.0346414	(mean)
		s3uni	=	.6954796	(mean)
		lngdppc_re~t	=	8.028701	(mean)
		lngdppc_se~r	=	8.029056	(mean)
		westandrus~y	=	.6098429	(mean)
		_Iyear_1975	=	0	(mean)
		_Iyear_1980	=	0	(mean)
		_Iyear_1985	=	0	(mean)
		_Iyear_1990	=	.2719309	(mean)
		_Iyear_1995	=	.3580109	(mean)
		_Iyear_2000	=	.3582823	(mean)
		_Iyear_2005	=	.0117759	(mean)
3._at	:	lndistance	=	8.632785	(mean)
		powerpc_re~t	=	-.2	
		powerpc_se~r	=	-.0346414	(mean)
		s3uni	=	.6954796	(mean)
		lngdppc_re~t	=	8.028701	(mean)
		lngdppc_se~r	=	8.029056	(mean)
		westandrus~y	=	.6098429	(mean)
		_Iyear_1975	=	0	(mean)
		_Iyear_1980	=	0	(mean)
		_Iyear_1985	=	0	(mean)
		_Iyear_1990	=	.2719309	(mean)
		_Iyear_1995	=	.3580109	(mean)
		_Iyear_2000	=	.3582823	(mean)
		_Iyear_2005	=	.0117759	(mean)
4._at	:	lndistance	=	8.632785	(mean)
		powerpc_re~t	=	.8	
		powerpc_se~r	=	-.0346414	(mean)
		s3uni	=	.6954796	(mean)
		lngdppc_re~t	=	8.028701	(mean)
		lngdppc_se~r	=	8.029056	(mean)
		westandrus~y	=	.6098429	(mean)
		_Iyear_1975	=	0	(mean)
		_Iyear_1980	=	0	(mean)
		_Iyear_1985	=	0	(mean)
		_Iyear_1990	=	.2719309	(mean)
		_Iyear_1995	=	.3580109	(mean)
		_Iyear_2000	=	.3582823	(mean)
		_Iyear_2005	=	.0117759	(mean)
5._at	:	lndistance	=	8.632785	(mean)
		powerpc_re~t	=	1.8	
		powerpc_se~r	=	-.0346414	(mean)
		s3uni	=	.6954796	(mean)
		lngdppc_re~t	=	8.028701	(mean)
		lngdppc_se~r	=	8.029056	(mean)
		westandrus~y	=	.6098429	(mean)
		_Iyear_1975	=	0	(mean)
		_Iyear_1980	=	0	(mean)
		_Iyear_1985	=	0	(mean)
		_Iyear_1990	=	.2719309	(mean)
		_Iyear_1995	=	.3580109	(mean)
		_Iyear_2000	=	.3582823	(mean)
		_Iyear_2005	=	.0117759	(mean)

```

6._at      : lndistance      =      8.632785 (mean)
              powerpc_re~t   =           2.8
              powerpc_se~r   =     -.0346414 (mean)
              s3uni          =     .6954796 (mean)
              lngdppc_re~t   =     8.028701 (mean)
              lngdppc_se~r   =     8.029056 (mean)
              westandrus~y   =     .6098429 (mean)
              _Iyear_1975    =           0 (mean)
              _Iyear_1980    =           0 (mean)
              _Iyear_1985    =           0 (mean)
              _Iyear_1990    =     .2719309 (mean)
              _Iyear_1995    =     .3580109 (mean)
              _Iyear_2000    =     .3582823 (mean)
              _Iyear_2005    =     .0117759 (mean)

7._at      : lndistance      =      8.632785 (mean)
              powerpc_re~t   =           3.8
              powerpc_se~r   =     -.0346414 (mean)
              s3uni          =     .6954796 (mean)
              lngdppc_re~t   =     8.028701 (mean)
              lngdppc_se~r   =     8.029056 (mean)
              westandrus~y   =     .6098429 (mean)
              _Iyear_1975    =           0 (mean)
              _Iyear_1980    =           0 (mean)
              _Iyear_1985    =           0 (mean)
              _Iyear_1990    =     .2719309 (mean)
              _Iyear_1995    =     .3580109 (mean)
              _Iyear_2000    =     .3582823 (mean)
              _Iyear_2005    =     .0117759 (mean)

8._at      : lndistance      =      8.632785 (mean)
              powerpc_re~t   =           4.8
              powerpc_se~r   =     -.0346414 (mean)
              s3uni          =     .6954796 (mean)
              lngdppc_re~t   =     8.028701 (mean)
              lngdppc_se~r   =     8.029056 (mean)
              westandrus~y   =     .6098429 (mean)
              _Iyear_1975    =           0 (mean)
              _Iyear_1980    =           0 (mean)
              _Iyear_1985    =           0 (mean)
              _Iyear_1990    =     .2719309 (mean)
              _Iyear_1995    =     .3580109 (mean)
              _Iyear_2000    =     .3582823 (mean)
              _Iyear_2005    =     .0117759 (mean)

```

		Delta-method		z	P> z	[95% Conf. Interval]	
		dy/dx	Std. Err.				
s3uni							
	_at						
	1	.0193493	.0043178	4.48	0.000	.0108866	.0278119
	2	.0503127	.0101335	4.96	0.000	.0304513	.0701741
	3	.0840035	.0145813	5.76	0.000	.0554246	.1125823
	4	.0189655	.0305707	0.62	0.535	-.040952	.078883
	5	-.0796455	.0465836	-1.71	0.087	-.1709476	.0116566
	6	-.0617313	.0261209	-2.36	0.018	-.1129273	-.0105353
	7	-.0257655	.0097306	-2.65	0.008	-.0448372	-.0066938
	8	-.0087414	.0031441	-2.78	0.005	-.0149036	-.0025791

. margins, dydx(s3uni) at(powerpc_sender=(-2.2 -1.2 -.2 .8 1.8 2.8 3.8 4.8)) atmeans

```

Conditional marginal effects      Number of obs   =      66322
Model VCE      : Robust

```

```

Expression      : Pr(dr_at_recipient_dum), predict()
dy/dx w.r.t.    : s3uni

```

```

1._at      : lndistance      =      8.632785 (mean)
              powerpc_re~t   =     -.0357158 (mean)
              powerpc_se~r   =           -2.2
              s3uni          =     .6954796 (mean)
              lngdppc_re~t   =     8.028701 (mean)

```

	lngdppc_se~r	=	8.029056 (mean)
	westandrus~y	=	.6098429 (mean)
	_Iyear_1975	=	0 (mean)
	_Iyear_1980	=	0 (mean)
	_Iyear_1985	=	0 (mean)
	_Iyear_1990	=	.2719309 (mean)
	_Iyear_1995	=	.3580109 (mean)
	_Iyear_2000	=	.3582823 (mean)
	_Iyear_2005	=	.0117759 (mean)
2._at	: lndistance	=	8.632785 (mean)
	powerpc_re~t	=	-.0357158 (mean)
	powerpc_se~r	=	-1.2
	s3uni	=	.6954796 (mean)
	lngdppc_re~t	=	8.028701 (mean)
	lngdppc_se~r	=	8.029056 (mean)
	westandrus~y	=	.6098429 (mean)
	_Iyear_1975	=	0 (mean)
	_Iyear_1980	=	0 (mean)
	_Iyear_1985	=	0 (mean)
	_Iyear_1990	=	.2719309 (mean)
	_Iyear_1995	=	.3580109 (mean)
	_Iyear_2000	=	.3582823 (mean)
	_Iyear_2005	=	.0117759 (mean)
3._at	: lndistance	=	8.632785 (mean)
	powerpc_re~t	=	-.0357158 (mean)
	powerpc_se~r	=	-.2
	s3uni	=	.6954796 (mean)
	lngdppc_re~t	=	8.028701 (mean)
	lngdppc_se~r	=	8.029056 (mean)
	westandrus~y	=	.6098429 (mean)
	_Iyear_1975	=	0 (mean)
	_Iyear_1980	=	0 (mean)
	_Iyear_1985	=	0 (mean)
	_Iyear_1990	=	.2719309 (mean)
	_Iyear_1995	=	.3580109 (mean)
	_Iyear_2000	=	.3582823 (mean)
	_Iyear_2005	=	.0117759 (mean)
4._at	: lndistance	=	8.632785 (mean)
	powerpc_re~t	=	-.0357158 (mean)
	powerpc_se~r	=	.8
	s3uni	=	.6954796 (mean)
	lngdppc_re~t	=	8.028701 (mean)
	lngdppc_se~r	=	8.029056 (mean)
	westandrus~y	=	.6098429 (mean)
	_Iyear_1975	=	0 (mean)
	_Iyear_1980	=	0 (mean)
	_Iyear_1985	=	0 (mean)
	_Iyear_1990	=	.2719309 (mean)
	_Iyear_1995	=	.3580109 (mean)
	_Iyear_2000	=	.3582823 (mean)
	_Iyear_2005	=	.0117759 (mean)
5._at	: lndistance	=	8.632785 (mean)
	powerpc_re~t	=	-.0357158 (mean)
	powerpc_se~r	=	1.8
	s3uni	=	.6954796 (mean)
	lngdppc_re~t	=	8.028701 (mean)
	lngdppc_se~r	=	8.029056 (mean)
	westandrus~y	=	.6098429 (mean)
	_Iyear_1975	=	0 (mean)
	_Iyear_1980	=	0 (mean)
	_Iyear_1985	=	0 (mean)
	_Iyear_1990	=	.2719309 (mean)
	_Iyear_1995	=	.3580109 (mean)
	_Iyear_2000	=	.3582823 (mean)
	_Iyear_2005	=	.0117759 (mean)
6._at	: lndistance	=	8.632785 (mean)
	powerpc_re~t	=	-.0357158 (mean)
	powerpc_se~r	=	2.8
	s3uni	=	.6954796 (mean)


```

lngdppc_re~t = 8.028701 (mean)
lngdppc_se~r = 8.029056 (mean)
westandrus~y = .6098429 (mean)
_Iyear_1975 = 0 (mean)
_Iyear_1980 = 0 (mean)
_Iyear_1985 = 0 (mean)
_Iyear_1990 = .2719309 (mean)
_Iyear_1995 = .3580109 (mean)
_Iyear_2000 = .3582823 (mean)
_Iyear_2005 = .0117759 (mean)

7._at : lngdistance = 8.632785 (mean)
powerpc_re~t = -.0357158 (mean)
powerpc_se~r = 3.8
s3uni = .6954796 (mean)
lngdppc_re~t = 8.028701 (mean)
lngdppc_se~r = 8.029056 (mean)
westandrus~y = .6098429 (mean)
_Iyear_1975 = 0 (mean)
_Iyear_1980 = 0 (mean)
_Iyear_1985 = 0 (mean)
_Iyear_1990 = .2719309 (mean)
_Iyear_1995 = .3580109 (mean)
_Iyear_2000 = .3582823 (mean)
_Iyear_2005 = .0117759 (mean)

8._at : lngdistance = 8.632785 (mean)
powerpc_re~t = -.0357158 (mean)
powerpc_se~r = 4.8
s3uni = .6954796 (mean)
lngdppc_re~t = 8.028701 (mean)
lngdppc_se~r = 8.029056 (mean)
westandrus~y = .6098429 (mean)
_Iyear_1975 = 0 (mean)
_Iyear_1980 = 0 (mean)
_Iyear_1985 = 0 (mean)
_Iyear_1990 = .2719309 (mean)
_Iyear_1995 = .3580109 (mean)
_Iyear_2000 = .3582823 (mean)
_Iyear_2005 = .0117759 (mean)

```

		Delta-method		z	P> z	[95% Conf. Interval]	
		dy/dx	Std. Err.				
s3uni							
	_at						
	1	.0106733	.0036168	2.95	0.003	.0035845	.0177621
	2	.0332277	.0090532	3.67	0.000	.0154838	.0509717
	3	.0768533	.0142957	5.38	0.000	.0488344	.1048723
	4	.0794256	.0281171	2.82	0.005	.0242114	.1346397
	5	.0137942	.0392114	0.35	0.725	-.0630588	.0906472
	6	-.008505	.0204709	-0.42	0.678	-.0486272	.0316172
	7	-.0054594	.0071331	-0.77	0.444	-.01944	.0085212
	8	-.0020771	.0021583	-0.96	0.336	-.0063073	.002153

```
. margins, dydx(*) atmeans
```

```
Conditional marginal effects
Model VCE : Robust
```

```
Number of obs = 66322
```

```

Expression : Pr(dr_at_recipient_dum), predict()
dy/dx w.r.t. : lngdistance powerpc_recipient powerpc_sender s3uni lngdppc_recipient lngdppc_sender
westandruscoldummy _Iyear_1975 _Iyear_1980 _Iyear_1985 _Iyear_1990 _Iyear_1995
_Iyear_2000 _Iyear_2005

at : lngdistance = 8.632785 (mean)
powerpc_re~t = -.0357158 (mean)
powerpc_se~r = -.0346414 (mean)
s3uni = .6954796 (mean)
lngdppc_re~t = 8.028701 (mean)
lngdppc_se~r = 8.029056 (mean)
westandrus~y = .6098429 (mean)
_Iyear_1975 = 0 (mean)

```

```

_Iyear_1980 = 0 (mean)
_Iyear_1985 = 0 (mean)
_Iyear_1990 = .2719309 (mean)
_Iyear_1995 = .3580109 (mean)
_Iyear_2000 = .3582823 (mean)
_Iyear_2005 = .0117759 (mean)

```

	Delta-method					
	dy/dx	Std. Err.	z	P> z	[95% Conf. Interval]	
lndistance	-.2091753	.0047324	-44.20	0.000	-.2184505	-.1999
powerpc_recipient	.2270358	.0049204	46.14	0.000	.217392	.2366797
powerpc_sender	.2359644	.0051769	45.58	0.000	.2258178	.246111
s3uni	.0833012	.0147761	5.64	0.000	.0543405	.1122619
lngdppc_recipient	.0192187	.0033978	5.66	0.000	.0125591	.0258783
lngdppc_sender	.0062156	.0034677	1.79	0.073	-.0005809	.0130121
westandruscoldummy	-.0809905	.0068354	-11.85	0.000	-.0943875	-.0675934
_Iyear_1975	0	(omitted)				
_Iyear_1980	0	(omitted)				
_Iyear_1985	0	(omitted)				
_Iyear_1990	.1478052	.0142775	10.35	0.000	.1198219	.1757885
_Iyear_1995	.0662189	.0138829	4.77	0.000	.039009	.0934288
_Iyear_2000	.0463532	.0136991	3.38	0.001	.0195035	.073203
_Iyear_2005	0	(omitted)				

```

.
.
. * Use probit instead of logit
. xi: probit dr_at_recipient_dum lndistance powerpc_recipient powerpc_sender s3uni
c.s3uni#c.pow
> erpc_recipient c.s3uni#c.powerpc_sender lngdppc_recipient lngdppc_sender westandruscoldummy
i.yea
> r if samedyad==0, cluster( dyadid)
i.year _Iyear_1970-2005 (naturally coded; _Iyear_1970 omitted)

```

```

Iteration 0: log pseudolikelihood = -84862.419
Iteration 1: log pseudolikelihood = -54193.128
Iteration 2: log pseudolikelihood = -53861.416
Iteration 3: log pseudolikelihood = -53860.912
Iteration 4: log pseudolikelihood = -53860.912

```

```

Probit regression              Number of obs   =    133953
                              Wald chi2(16)    =    8361.68
                              Prob > chi2      =    0.0000
Log pseudolikelihood = -53860.912      Pseudo R2   =    0.3653

```

(Std. Err. adjusted for 24163 clusters in dyadid)

dr_at_recipient_dum	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
lndistance	-.6992445	.0138606	-50.45	0.000	-.7264107	-.6720782
powerpc_recipient	.6132265	.0243916	25.14	0.000	.5654198	.6610332
powerpc_sender	.6207129	.0246848	25.15	0.000	.5723316	.6690942
s3uni	.2035392	.031333	6.50	0.000	.1421277	.2649507
c.s3uni#c.powerpc_recipient	.0476446	.0327607	1.45	0.146	-.0165652	.1118545
c.s3uni#c.powerpc_sender	.1447874	.0330687	4.38	0.000	.0799739	.2096009
lngdppc_recipient	.1323099	.0094556	13.99	0.000	.1137773	.1508426
lngdppc_sender	.0721212	.0098757	7.30	0.000	.0527653	.0914771
westandruscoldummy	-.2335797	.02049	-11.40	0.000	-.2737395	-.19342
_Iyear_1975	.2429172	.0145873	16.65	0.000	.2143266	.2715078
_Iyear_1980	.4198174	.0161916	25.93	0.000	.3880824	.4515524
_Iyear_1985	-.1163033	.0164495	-7.07	0.000	-.1485437	-.0840629
_Iyear_1990	-.131177	.017358	-7.56	0.000	-.1651981	-.0971559
_Iyear_1995	-.4093234	.0174803	-23.42	0.000	-.4435841	-.3750627
_Iyear_2000	-.481374	.0183426	-26.24	0.000	-.5173247	-.4454232
_Iyear_2005	-.6976962	.0505426	-13.80	0.000	-.796758	-.5986345
_cons	4.063616	.1705785	23.82	0.000	3.729288	4.397943

```
. estat class
```

```
Probit model for dr_at_recipient_dum
```

Classified	True		Total
	D	~D	
+	27623	7250	34873
-	16458	82622	99080
Total	44081	89872	133953

```
Classified + if predicted Pr(D) >= .5
True D defined as dr_at_recipient_dum != 0
```

Sensitivity	Pr(+ D)	62.66%
Specificity	Pr(- ~D)	91.93%
Positive predictive value	Pr(D +)	79.21%
Negative predictive value	Pr(~D -)	83.39%
False + rate for true ~D	Pr(+ ~D)	8.07%
False - rate for true D	Pr(- D)	37.34%
False + rate for classified +	Pr(~D +)	20.79%
False - rate for classified -	Pr(D -)	16.61%
Correctly classified		82.30%

```
. margins, dydx(s3uni) at(powerpc_recipient=(-2.2 -1.2 -.2 .8 1.8 2.8 3.8 4.8)) atmeans
```

```
Conditional marginal effects          Number of obs   =    133953
Model VCE      : Robust
```

```
Expression   : Pr(dr_at_recipient_dum), predict()
dy/dx w.r.t. : s3uni
```

1._at	: lndistance	=	8.660738 (mean)
	powerpc_re~t	=	-2.2
	powerpc_se~r	=	-.0892789 (mean)
	s3uni	=	.6597967 (mean)
	lngdppc_re~t	=	7.971586 (mean)
	lngdppc_se~r	=	7.972003 (mean)
	westandrus~y	=	.5842198 (mean)
	_Iyear_1975	=	.1293737 (mean)
	_Iyear_1980	=	.1343456 (mean)
	_Iyear_1985	=	.1343904 (mean)
	_Iyear_1990	=	.1346368 (mean)
	_Iyear_1995	=	.1772562 (mean)
	_Iyear_2000	=	.1773906 (mean)
	_Iyear_2005	=	.0058304 (mean)
2._at	: lndistance	=	8.660738 (mean)
	powerpc_re~t	=	-1.2
	powerpc_se~r	=	-.0892789 (mean)
	s3uni	=	.6597967 (mean)
	lngdppc_re~t	=	7.971586 (mean)
	lngdppc_se~r	=	7.972003 (mean)
	westandrus~y	=	.5842198 (mean)
	_Iyear_1975	=	.1293737 (mean)
	_Iyear_1980	=	.1343456 (mean)
	_Iyear_1985	=	.1343904 (mean)
	_Iyear_1990	=	.1346368 (mean)
	_Iyear_1995	=	.1772562 (mean)
	_Iyear_2000	=	.1773906 (mean)
	_Iyear_2005	=	.0058304 (mean)
3._at	: lndistance	=	8.660738 (mean)
	powerpc_re~t	=	-.2
	powerpc_se~r	=	-.0892789 (mean)
	s3uni	=	.6597967 (mean)
	lngdppc_re~t	=	7.971586 (mean)
	lngdppc_se~r	=	7.972003 (mean)
	westandrus~y	=	.5842198 (mean)

		_Iyear_1975	=	.1293737	(mean)
		_Iyear_1980	=	.1343456	(mean)
		_Iyear_1985	=	.1343904	(mean)
		_Iyear_1990	=	.1346368	(mean)
		_Iyear_1995	=	.1772562	(mean)
		_Iyear_2000	=	.1773906	(mean)
		_Iyear_2005	=	.0058304	(mean)
4._at	:	lndistance	=	8.660738	(mean)
		powerpc_re~t	=	.8	
		powerpc_se~r	=	-.0892789	(mean)
		s3uni	=	.6597967	(mean)
		lngdppc_re~t	=	7.971586	(mean)
		lngdppc_se~r	=	7.972003	(mean)
		westandrus~y	=	.5842198	(mean)
		_Iyear_1975	=	.1293737	(mean)
		_Iyear_1980	=	.1343456	(mean)
		_Iyear_1985	=	.1343904	(mean)
		_Iyear_1990	=	.1346368	(mean)
		_Iyear_1995	=	.1772562	(mean)
		_Iyear_2000	=	.1773906	(mean)
		_Iyear_2005	=	.0058304	(mean)
5._at	:	lndistance	=	8.660738	(mean)
		powerpc_re~t	=	1.8	
		powerpc_se~r	=	-.0892789	(mean)
		s3uni	=	.6597967	(mean)
		lngdppc_re~t	=	7.971586	(mean)
		lngdppc_se~r	=	7.972003	(mean)
		westandrus~y	=	.5842198	(mean)
		_Iyear_1975	=	.1293737	(mean)
		_Iyear_1980	=	.1343456	(mean)
		_Iyear_1985	=	.1343904	(mean)
		_Iyear_1990	=	.1346368	(mean)
		_Iyear_1995	=	.1772562	(mean)
		_Iyear_2000	=	.1773906	(mean)
		_Iyear_2005	=	.0058304	(mean)
6._at	:	lndistance	=	8.660738	(mean)
		powerpc_re~t	=	2.8	
		powerpc_se~r	=	-.0892789	(mean)
		s3uni	=	.6597967	(mean)
		lngdppc_re~t	=	7.971586	(mean)
		lngdppc_se~r	=	7.972003	(mean)
		westandrus~y	=	.5842198	(mean)
		_Iyear_1975	=	.1293737	(mean)
		_Iyear_1980	=	.1343456	(mean)
		_Iyear_1985	=	.1343904	(mean)
		_Iyear_1990	=	.1346368	(mean)
		_Iyear_1995	=	.1772562	(mean)
		_Iyear_2000	=	.1773906	(mean)
		_Iyear_2005	=	.0058304	(mean)
7._at	:	lndistance	=	8.660738	(mean)
		powerpc_re~t	=	3.8	
		powerpc_se~r	=	-.0892789	(mean)
		s3uni	=	.6597967	(mean)
		lngdppc_re~t	=	7.971586	(mean)
		lngdppc_se~r	=	7.972003	(mean)
		westandrus~y	=	.5842198	(mean)
		_Iyear_1975	=	.1293737	(mean)
		_Iyear_1980	=	.1343456	(mean)
		_Iyear_1985	=	.1343904	(mean)
		_Iyear_1990	=	.1346368	(mean)
		_Iyear_1995	=	.1772562	(mean)
		_Iyear_2000	=	.1773906	(mean)
		_Iyear_2005	=	.0058304	(mean)
8._at	:	lndistance	=	8.660738	(mean)
		powerpc_re~t	=	4.8	
		powerpc_se~r	=	-.0892789	(mean)
		s3uni	=	.6597967	(mean)
		lngdppc_re~t	=	7.971586	(mean)
		lngdppc_se~r	=	7.972003	(mean)

```

westandrus~y      = .5842198 (mean)
_Iyear_1975      = .1293737 (mean)
_Iyear_1980      = .1343456 (mean)
_Iyear_1985      = .1343904 (mean)
_Iyear_1990      = .1346368 (mean)
_Iyear_1995      = .1772562 (mean)
_Iyear_2000      = .1773906 (mean)
_Iyear_2005      = .0058304 (mean)

```

		Delta-method		z	P> z	[95% Conf. Interval]	
		dy/dx	Std. Err.				
s3uni	_at						
	1	.0050678	.0048996	1.03	0.301	-.0045352	.0146709
	2	.0225746	.0091186	2.48	0.013	.0047024	.0404467
	3	.057903	.0106585	5.43	0.000	.0370128	.0787932
	4	.0912302	.0152013	6.00	0.000	.0614363	.1210241
	5	.090745	.0203797	4.45	0.000	.0508015	.1306885
	6	.0577985	.0163109	3.54	0.000	.0258297	.0897673
	7	.02377	.0079444	2.99	0.003	.0081993	.0393407
	8	.0063518	.0024565	2.59	0.010	.0015372	.0111665

```

. margins, dydx(s3uni) at(powerpc_sender=(-2.2 -1.2 -.2 .8 1.8 2.8 3.8 4.8)) atmeans

```

```

Conditional marginal effects      Number of obs   =    133953
Model VCE      : Robust

```

```

Expression      : Pr(dr_at_recipient_dum), predict()
dy/dx w.r.t.    : s3uni

```

```

1._at      : lndistance      = 8.660738 (mean)
              powerpc_re~t    = -.0902882 (mean)
              powerpc_se~r    = -.2
              s3uni           = .6597967 (mean)
              lngdppc_re~t    = 7.971586 (mean)
              lngdppc_se~r    = 7.972003 (mean)
              westandrus~y    = .5842198 (mean)
              _Iyear_1975    = .1293737 (mean)
              _Iyear_1980    = .1343456 (mean)
              _Iyear_1985    = .1343904 (mean)
              _Iyear_1990    = .1346368 (mean)
              _Iyear_1995    = .1772562 (mean)
              _Iyear_2000    = .1773906 (mean)
              _Iyear_2005    = .0058304 (mean)

2._at      : lndistance      = 8.660738 (mean)
              powerpc_re~t    = -.0902882 (mean)
              powerpc_se~r    = -1.2
              s3uni           = .6597967 (mean)
              lngdppc_re~t    = 7.971586 (mean)
              lngdppc_se~r    = 7.972003 (mean)
              westandrus~y    = .5842198 (mean)
              _Iyear_1975    = .1293737 (mean)
              _Iyear_1980    = .1343456 (mean)
              _Iyear_1985    = .1343904 (mean)
              _Iyear_1990    = .1346368 (mean)
              _Iyear_1995    = .1772562 (mean)
              _Iyear_2000    = .1773906 (mean)
              _Iyear_2005    = .0058304 (mean)

3._at      : lndistance      = 8.660738 (mean)
              powerpc_re~t    = -.0902882 (mean)
              powerpc_se~r    = -.2
              s3uni           = .6597967 (mean)
              lngdppc_re~t    = 7.971586 (mean)
              lngdppc_se~r    = 7.972003 (mean)
              westandrus~y    = .5842198 (mean)
              _Iyear_1975    = .1293737 (mean)
              _Iyear_1980    = .1343456 (mean)
              _Iyear_1985    = .1343904 (mean)
              _Iyear_1990    = .1346368 (mean)

```

		_Iyear_1995	=	.1772562	(mean)
		_Iyear_2000	=	.1773906	(mean)
		_Iyear_2005	=	.0058304	(mean)
4._at	:	lndistance	=	8.660738	(mean)
		powerpc_re~t	=	-.0902882	(mean)
		powerpc_se~r	=	.8	
		s3uni	=	.6597967	(mean)
		lngdppc_re~t	=	7.971586	(mean)
		lngdppc_se~r	=	7.972003	(mean)
		westandrus~y	=	.5842198	(mean)
		_Iyear_1975	=	.1293737	(mean)
		_Iyear_1980	=	.1343456	(mean)
		_Iyear_1985	=	.1343904	(mean)
		_Iyear_1990	=	.1346368	(mean)
		_Iyear_1995	=	.1772562	(mean)
		_Iyear_2000	=	.1773906	(mean)
		_Iyear_2005	=	.0058304	(mean)
5._at	:	lndistance	=	8.660738	(mean)
		powerpc_re~t	=	-.0902882	(mean)
		powerpc_se~r	=	1.8	
		s3uni	=	.6597967	(mean)
		lngdppc_re~t	=	7.971586	(mean)
		lngdppc_se~r	=	7.972003	(mean)
		westandrus~y	=	.5842198	(mean)
		_Iyear_1975	=	.1293737	(mean)
		_Iyear_1980	=	.1343456	(mean)
		_Iyear_1985	=	.1343904	(mean)
		_Iyear_1990	=	.1346368	(mean)
		_Iyear_1995	=	.1772562	(mean)
		_Iyear_2000	=	.1773906	(mean)
		_Iyear_2005	=	.0058304	(mean)
6._at	:	lndistance	=	8.660738	(mean)
		powerpc_re~t	=	-.0902882	(mean)
		powerpc_se~r	=	2.8	
		s3uni	=	.6597967	(mean)
		lngdppc_re~t	=	7.971586	(mean)
		lngdppc_se~r	=	7.972003	(mean)
		westandrus~y	=	.5842198	(mean)
		_Iyear_1975	=	.1293737	(mean)
		_Iyear_1980	=	.1343456	(mean)
		_Iyear_1985	=	.1343904	(mean)
		_Iyear_1990	=	.1346368	(mean)
		_Iyear_1995	=	.1772562	(mean)
		_Iyear_2000	=	.1773906	(mean)
		_Iyear_2005	=	.0058304	(mean)
7._at	:	lndistance	=	8.660738	(mean)
		powerpc_re~t	=	-.0902882	(mean)
		powerpc_se~r	=	3.8	
		s3uni	=	.6597967	(mean)
		lngdppc_re~t	=	7.971586	(mean)
		lngdppc_se~r	=	7.972003	(mean)
		westandrus~y	=	.5842198	(mean)
		_Iyear_1975	=	.1293737	(mean)
		_Iyear_1980	=	.1343456	(mean)
		_Iyear_1985	=	.1343904	(mean)
		_Iyear_1990	=	.1346368	(mean)
		_Iyear_1995	=	.1772562	(mean)
		_Iyear_2000	=	.1773906	(mean)
		_Iyear_2005	=	.0058304	(mean)
8._at	:	lndistance	=	8.660738	(mean)
		powerpc_re~t	=	-.0902882	(mean)
		powerpc_se~r	=	4.8	
		s3uni	=	.6597967	(mean)
		lngdppc_re~t	=	7.971586	(mean)
		lngdppc_se~r	=	7.972003	(mean)
		westandrus~y	=	.5842198	(mean)
		_Iyear_1975	=	.1293737	(mean)
		_Iyear_1980	=	.1343456	(mean)
		_Iyear_1985	=	.1343904	(mean)

```

_Iyear_1990 = .1346368 (mean)
_Iyear_1995 = .1772562 (mean)
_Iyear_2000 = .1773906 (mean)
_Iyear_2005 = .0058304 (mean)

```

		Delta-method				
		dy/dx	Std. Err.	z	P> z	[95% Conf. Interval]
s3uni	_at					
	1	-.0051783	.0036536	-1.42	0.156	-.0123391 .0019826
	2	.0038704	.008287	0.47	0.640	-.0123717 .0201125
	3	.0541366	.010616	5.10	0.000	.0333296 .0749437
	4	.1255804	.0151425	8.29	0.000	.0959017 .1552591
	5	.1375736	.0184337	7.46	0.000	.1014443 .173703
	6	.0812857	.0125784	6.46	0.000	.0566324 .105939
	7	.0271052	.0051314	5.28	0.000	.0170478 .0371626
	8	.0052578	.001298	4.05	0.000	.0027137 .0078019

```
. margins, dydx(*) atmeans
```

```

Conditional marginal effects      Number of obs   =      133953
Model VCE      : Robust

```

```

Expression      : Pr(dr_at_recipient_dum), predict()
dy/dx w.r.t.    : lndistance powerpc_recipient powerpc_sender s3uni lngdppc_recipient lngdppc_sender
                  westandruscoldummy _Iyear_1975 _Iyear_1980 _Iyear_1985 _Iyear_1990 _Iyear_1995
                  _Iyear_2000 _Iyear_2005
at              : lndistance      =      8.660738 (mean)
                  powerpc_re~t    =     -.0902882 (mean)
                  powerpc_se~r    =     -.0892789 (mean)
                  s3uni            =     .6597967 (mean)
                  lngdppc_re~t     =     7.971586 (mean)
                  lngdppc_se~r     =     7.972003 (mean)
                  westandrus~y     =     .5842198 (mean)
                  _Iyear_1975      =     .1293737 (mean)
                  _Iyear_1980      =     .1343456 (mean)
                  _Iyear_1985      =     .1343904 (mean)
                  _Iyear_1990      =     .1346368 (mean)
                  _Iyear_1995      =     .1772562 (mean)
                  _Iyear_2000      =     .1773906 (mean)
                  _Iyear_2005      =     .0058304 (mean)

```

		Delta-method				
		dy/dx	Std. Err.	z	P> z	[95% Conf. Interval]
	lndistance	-.2337745	.0047375	-49.35	0.000	-.2430598 -.2244891
	powerpc_recipient	.2155263	.0044694	48.22	0.000	.2067665 .2242861
	powerpc_sender	.2394575	.0049524	48.35	0.000	.2297509 .2491641
	s3uni	.0622883	.0108113	5.76	0.000	.0410985 .0834781
	lngdppc_recipient	.0442344	.0031388	14.09	0.000	.0380825 .0503863
	lngdppc_sender	.0241119	.0032951	7.32	0.000	.0176536 .0305701
	westandruscoldummy	-.0780914	.0068351	-11.43	0.000	-.091488 -.0646948
	_Iyear_1975	.0812131	.0049076	16.55	0.000	.0715944 .0908318
	_Iyear_1980	.1403552	.0054792	25.62	0.000	.1296161 .1510942
	_Iyear_1985	-.038883	.0054626	-7.12	0.000	-.0495895 -.0281765
	_Iyear_1990	-.0438557	.0057632	-7.61	0.000	-.0551513 -.0325601
	_Iyear_1995	-.1368468	.0057872	-23.65	0.000	-.1481896 -.125504
	_Iyear_2000	-.160935	.0060968	-26.40	0.000	-.1728846 -.1489855
	_Iyear_2005	-.2332568	.0169453	-13.77	0.000	-.266469 -.2000446

```

.
.
.
end of do-file

```