

Running R Analysis Code

Baobao Zhang

July 1, 2015

We knit to show the output of running the analysis code.

```
library(confounding)
```

```
## Loading required package: ggplot2
## Loading required package: foreign
## Loading required package: xtable
## Loading required package: reshape
## Loading required package: haven
## Loading required package: systemfit
## Loading required package: Matrix
##
## Attaching package: 'Matrix'
##
## The following object is masked from 'package:reshape':
##
##   expand
##
## Loading required package: car
## Loading required package: lmtest
## Loading required package: zoo
##
## Attaching package: 'zoo'
##
## The following objects are masked from 'package:base':
##
##   as.Date, as.Date.numeric
##
## Loading required package: lfe
##
## Attaching package: 'lfe'
##
## The following object is masked from 'package:lmtest':
##
##   waldtest
##
## Loading required package: pacman
## Loading required package: pwr
## Loading required package: reshape2
##
## Attaching package: 'reshape2'
##
## The following objects are masked from 'package:reshape':
##
##   colsplit, melt, recast
##
## Loading required package: dplyr
```

```
##
## Attaching package: 'dplyr'
##
## The following object is masked from 'package:reshape':
##
##   rename
##
## The following objects are masked from 'package:stats':
##
##   filter, lag
##
## The following objects are masked from 'package:base':
##
##   intersect, setdiff, setequal, union
##
## Loading required package: magrittr
## Loading required package: testthat
##
## Attaching package: 'testthat'
##
## The following objects are masked from 'package:magrittr':
##
##   equals, is_less_than, not

## Warning: replacing previous import by 'dplyr::rename' when loading
## 'confounding'

## Warning: replacing previous import by 'reshape2::colsplit' when loading
## 'confounding'

## Warning: replacing previous import by 'reshape2::melt' when loading
## 'confounding'

## Warning: replacing previous import by 'reshape2::recast' when loading
## 'confounding'

## Warning: replacing previous import by 'magrittr::%>%' when loading
## 'confounding'

## Warning: replacing previous import by 'testthat::equals' when loading
## 'confounding'

## Warning: replacing previous import by 'testthat::is_less_than' when loading
## 'confounding'

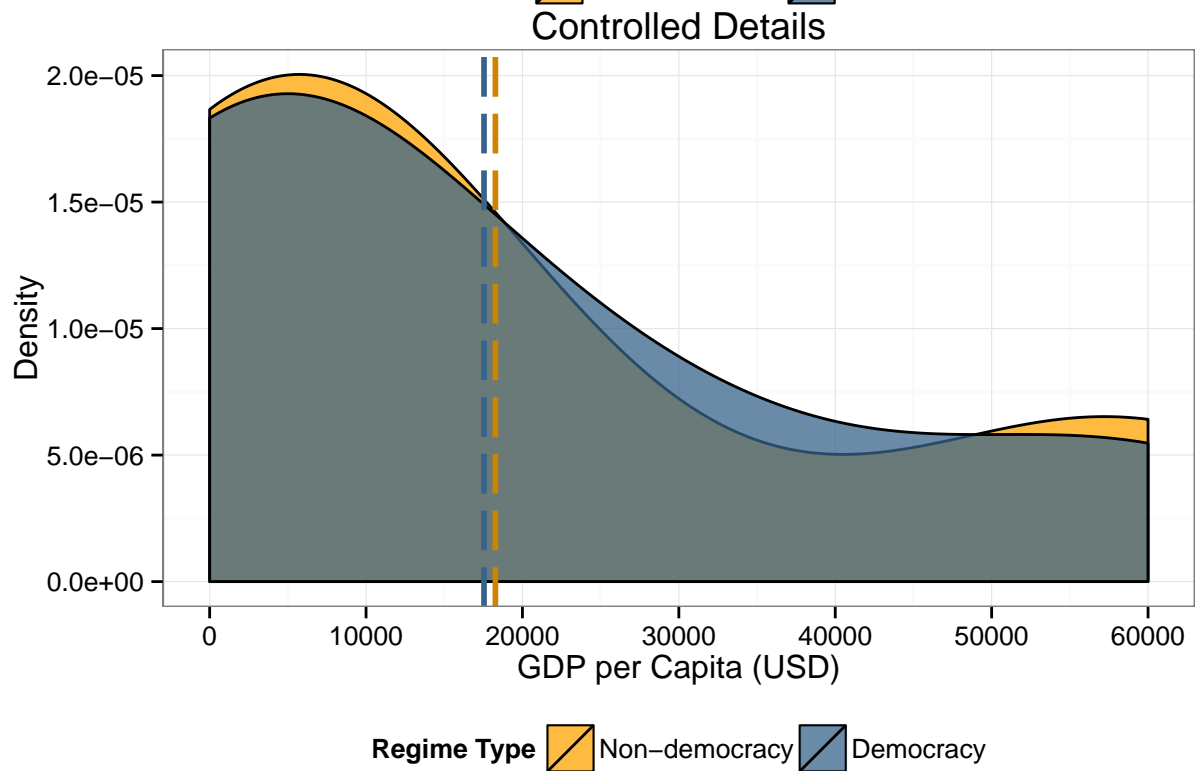
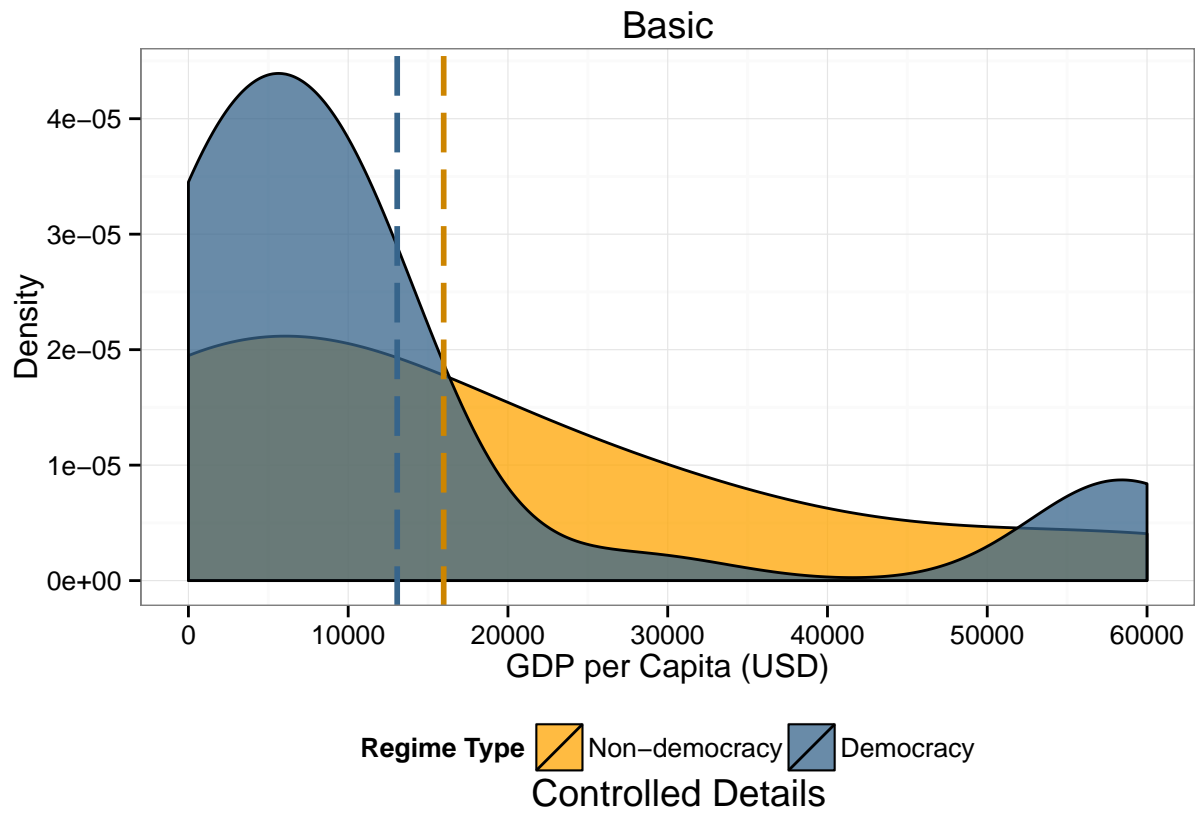
## Warning: replacing previous import by 'testthat::not' when loading
## 'confounding'
```

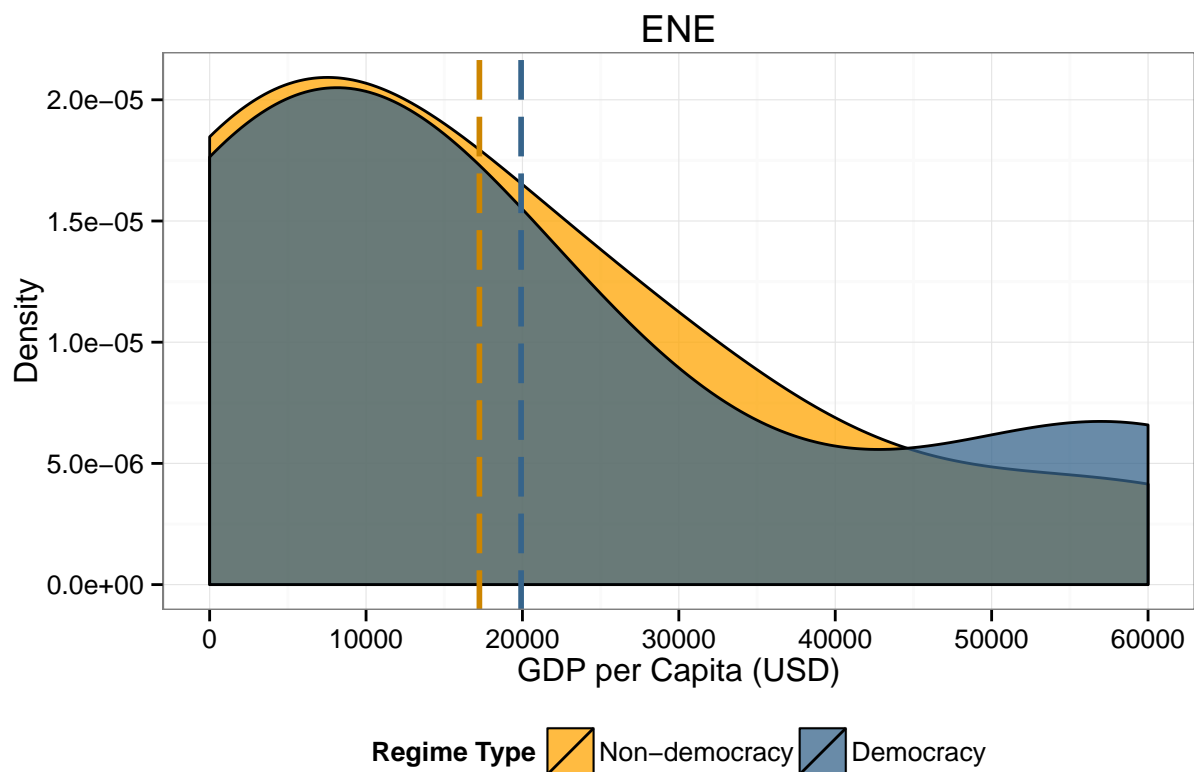
```
survey4_analyze(output_print = TRUE)
```

```
## [1] "Complied Date and Time: 2015-07-01 08:46:01"
```

```
## Loading required package: sandwich

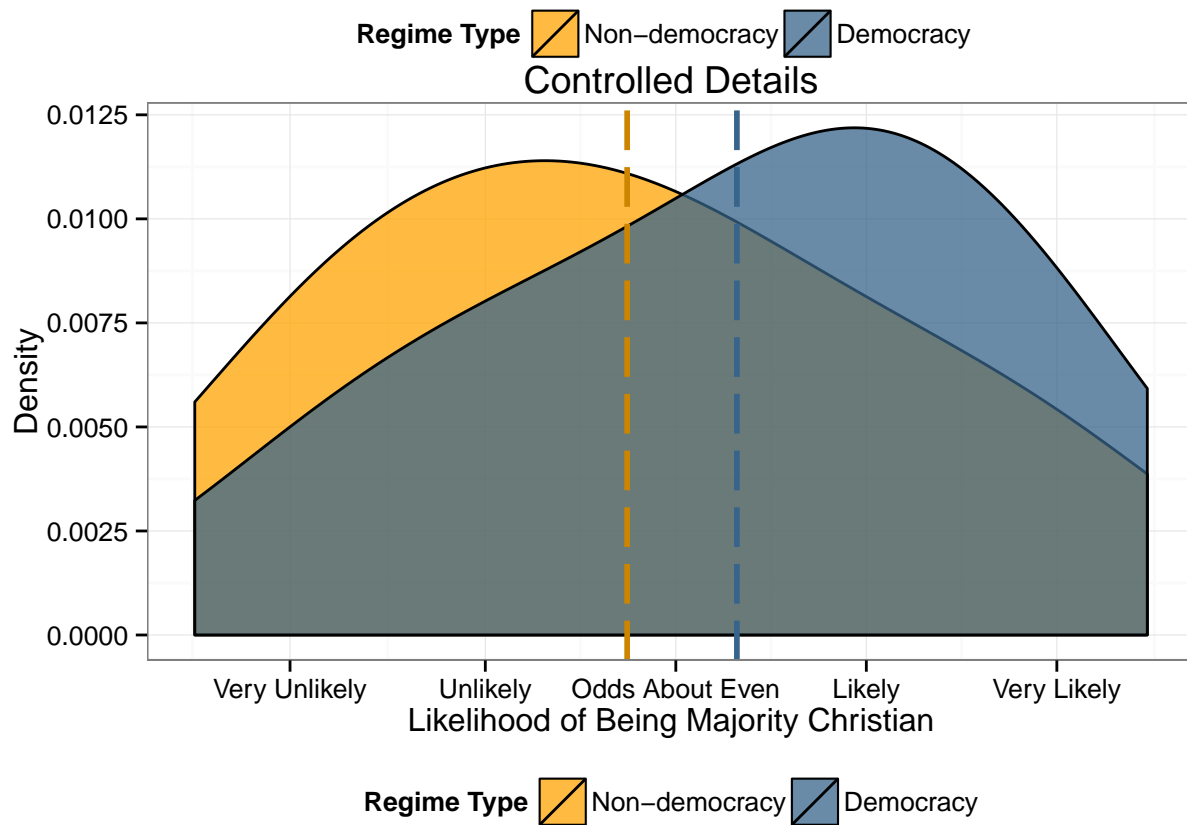
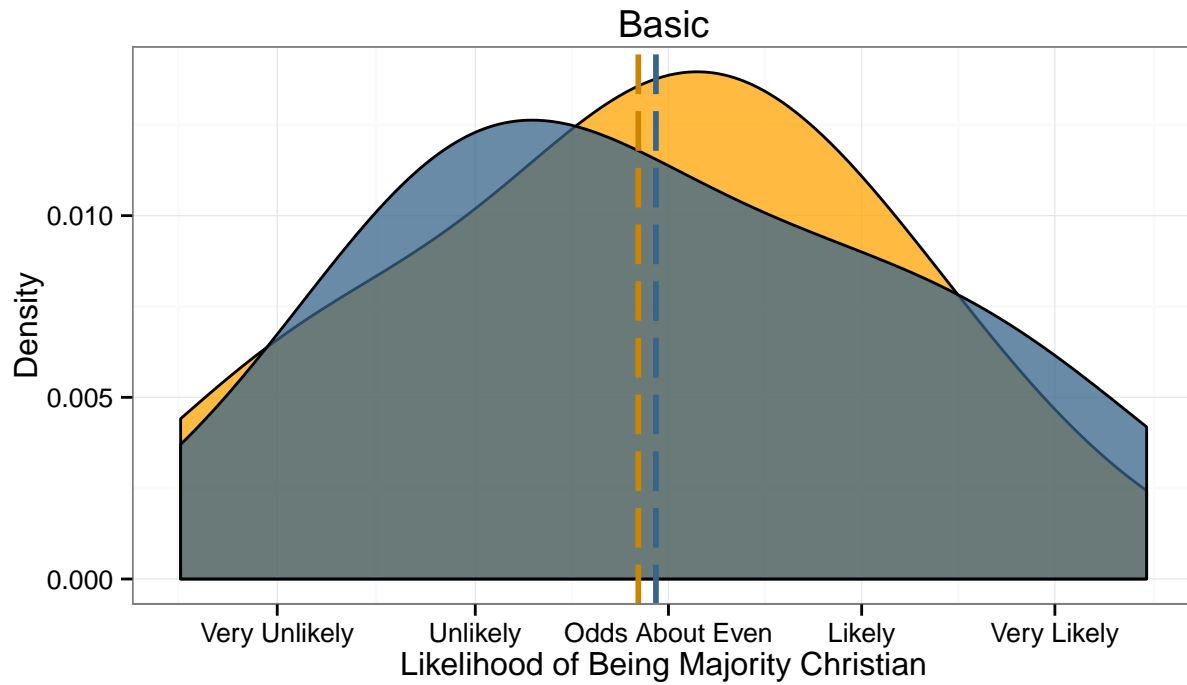
## [1] "Placebo Test C: Regions of the World"
##           [,1]      [,2]
## [1,]  0.1601764 0.2525493
## [2,]  0.1683116 0.2541643
## [3,] -0.1477916 0.2486409
##           [,1]      [,2]
## [1,]  0.1486742 0.2344140
## [2,]  0.1764706 0.2664850
## [3,] -0.1800357 0.3028875
##
## t test of coefficients:
##
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)    -0.242424   0.176944  -1.3701   0.1723
## ZDemocracy      0.148674   0.234414   0.6342   0.5267
## VControlled Details  0.242424   0.285056   0.8504   0.3961
## VENE            0.363636   0.264383   1.3754   0.1706
## ZDemocracy:VControlled Details  0.027796   0.354914   0.0783   0.9377
## ZDemocracy:VENE    -0.328710   0.383002  -0.8582   0.3918
##
##
## t test of coefficients:
##
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)    -0.0788561   0.1906332  -0.4137   0.6796
## ZDemocracy      0.1601764   0.2525493   0.6342   0.5267
## VControlled Details -0.0078499   0.2859670  -0.0275   0.9781
## VENE            0.1538548   0.2496906   0.6162   0.5385
## ZDemocracy:VControlled Details  0.0081353   0.3583024   0.0227   0.9819
## ZDemocracy:VENE    -0.3079680   0.3544058  -0.8690   0.3859
```

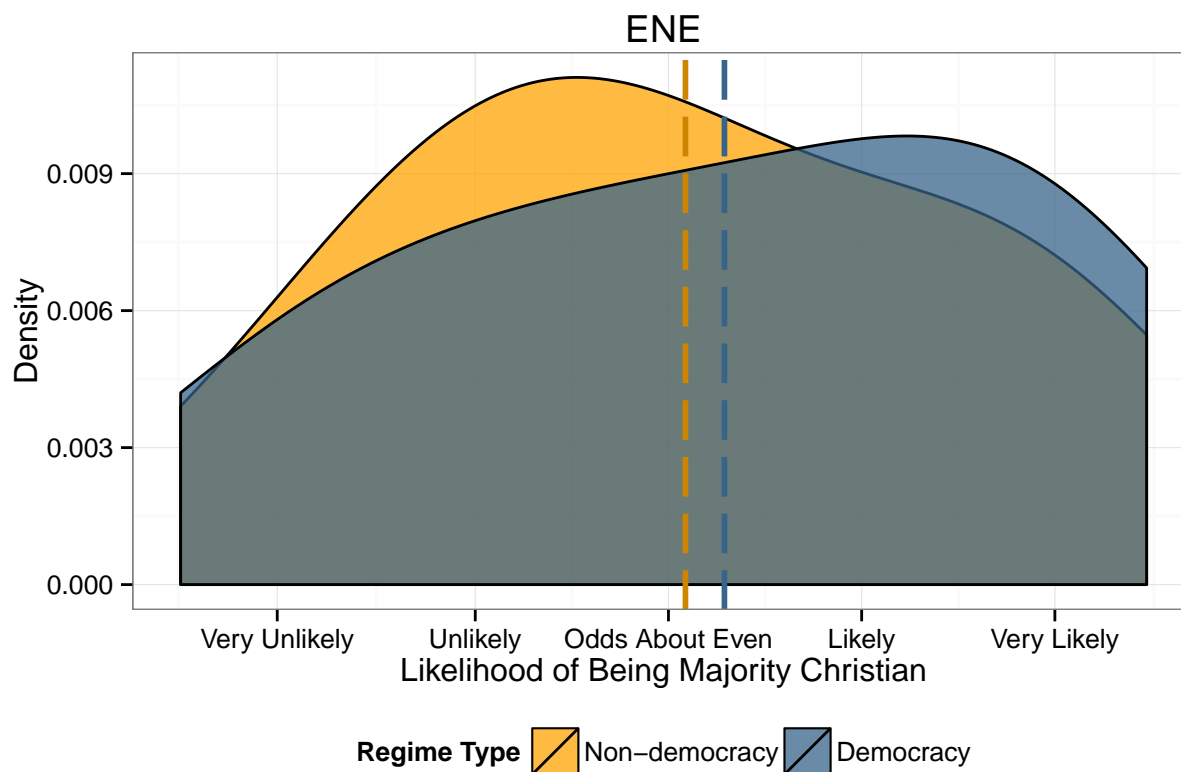




```
## [1] "Placebo Test D: GDP per Capita"
##           [,1]      [,2]
## [1,] -0.15634747 0.2530683
## [2,] -0.03314614 0.2524164
## [3,]  0.13301169 0.2488952
##           [,1]      [,2]
## [1,] -2909.028 4708.633
## [2,]  -727.535 5540.367
## [3,]  2666.414 4989.470
##
## t test of coefficients:
##
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)    15976.8     3362.0   4.7521 3.937e-06 ***
## ZDemocracy     -2909.0     4708.6  -0.6178  0.5374
## VControlled Details 2294.6     5279.6  0.4346  0.6643
## VENE           1271.5     4709.1  0.2700  0.7874
## ZDemocracy:VControlled Details 2181.5     7271.0  0.3000  0.7645
## ZDemocracy:VENE    5575.4     6860.5  0.8127  0.4174
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## t test of coefficients:
##
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)    0.076971   0.180695  0.4260  0.6706
## ZDemocracy     -0.156347   0.253068 -0.6178  0.5374
## VControlled Details -0.059896   0.258934 -0.2313  0.8173
```

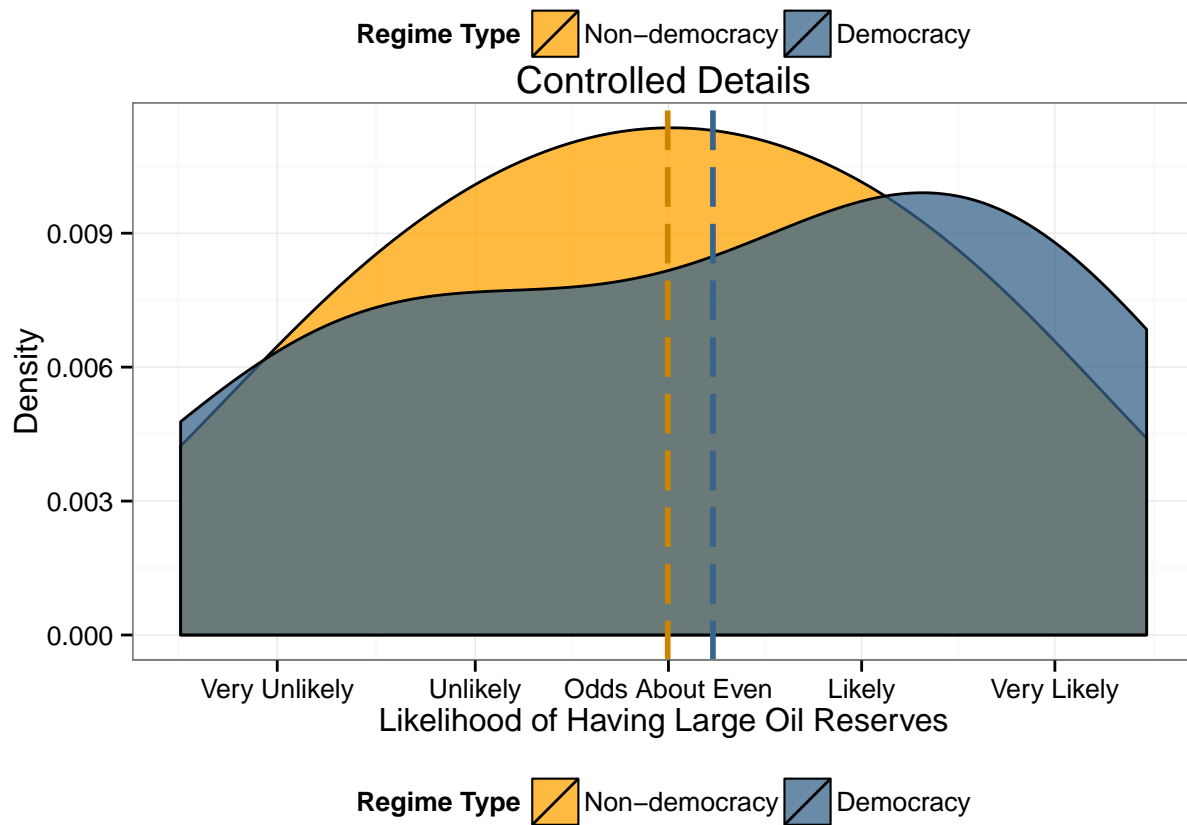
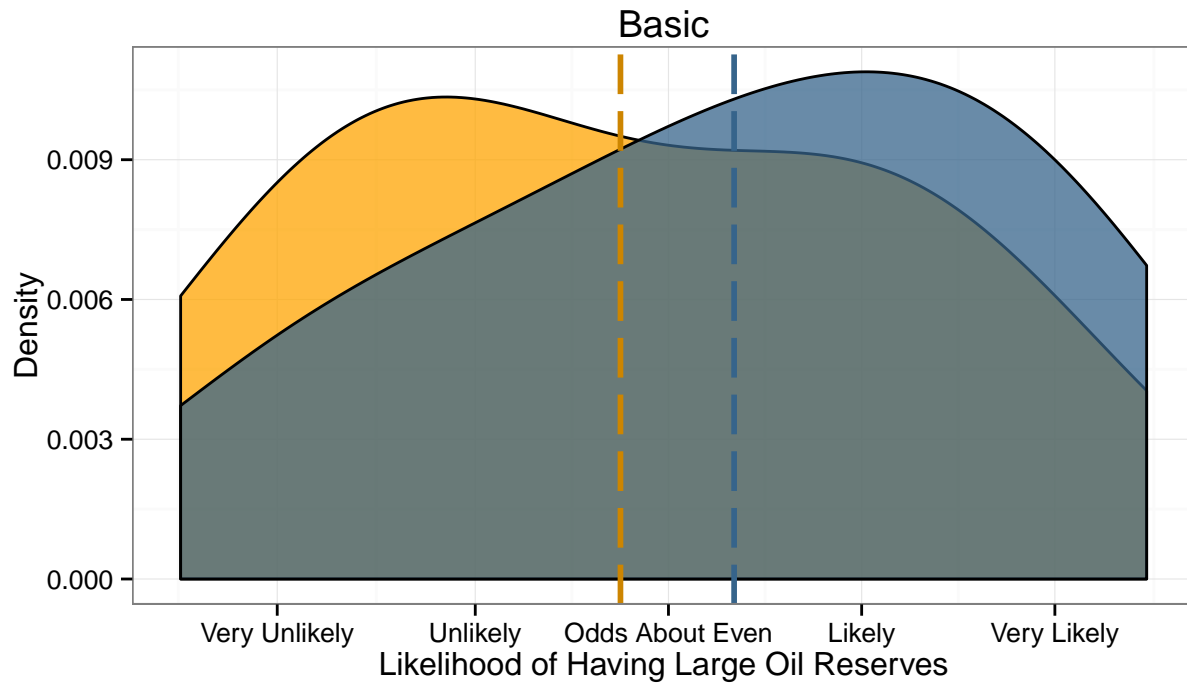
## VENE	-0.144470	0.244347	-0.5912	0.5551
## ZDemocracy:VControlled Details	0.123201	0.357432	0.3447	0.7307
## ZDemocracy:VENE	0.289359	0.354954	0.8152	0.4160

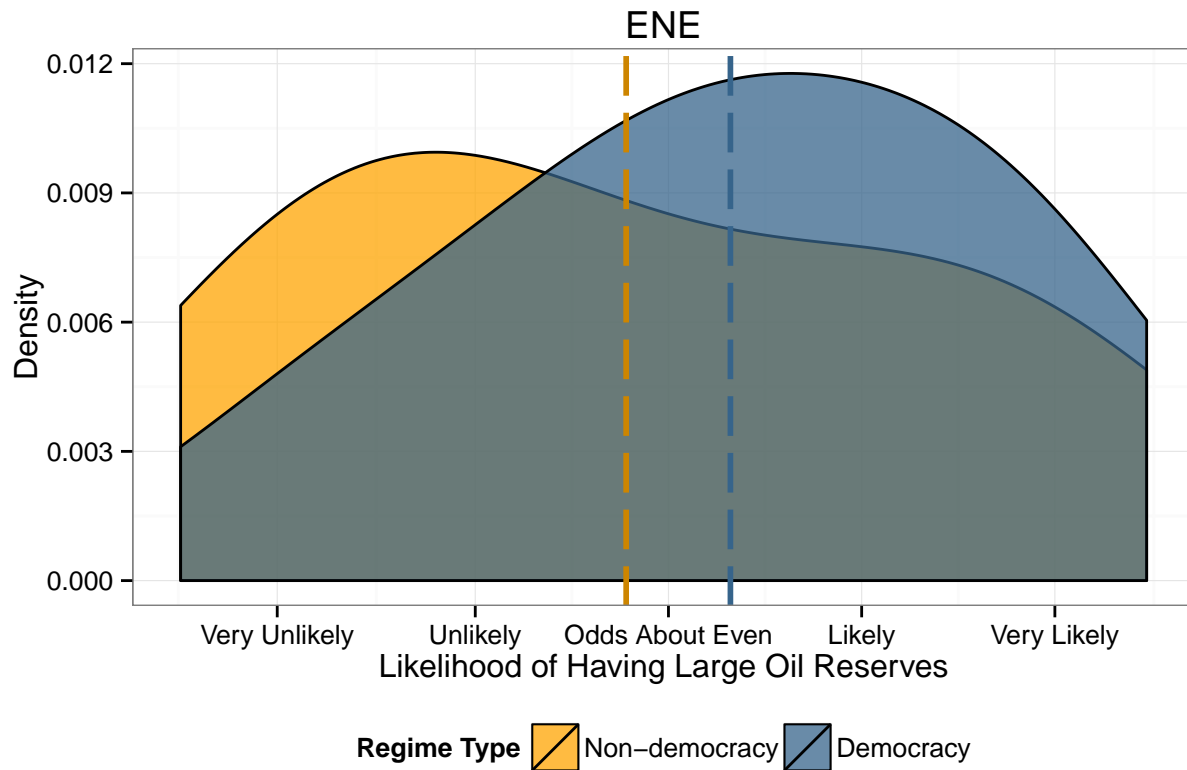




```
## [1] "Placebo Test E: Religion"
##           [,1]      [,2]
## [1,] 0.07482884 0.2541112
## [2,] 0.42048668 0.2466398
## [3,] 0.13978928 0.2490289
##           [,1]      [,2]
## [1,]  1.824337 6.195266
## [2,] 11.521140 6.757816
## [3,]  4.036542 7.190935
##
## t test of coefficients:
##
##               Estimate Std. Error t value Pr(>|t|)
## (Intercept)      47.3788    4.1833  11.3257  <2e-16 ***
## ZDemocracy         1.8243    6.1953   0.2945  0.7687
## VControlled Details -1.9882    6.4729  -0.3072  0.7591
## VENE               4.8788    6.4332   0.7584  0.4492
## ZDemocracy:VControlled Details  9.6968    9.1678   1.0577  0.2915
## ZDemocracy:VENE      2.2122    9.4916   0.2331  0.8160
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## t test of coefficients:
##
##               Estimate Std. Error t value Pr(>|t|)
## (Intercept)    -0.036839   0.171587  -0.2147  0.8302
## ZDemocracy       0.074829   0.254111   0.2945  0.7687
## VControlled Details -0.179776  0.248879  -0.7223  0.4710
```

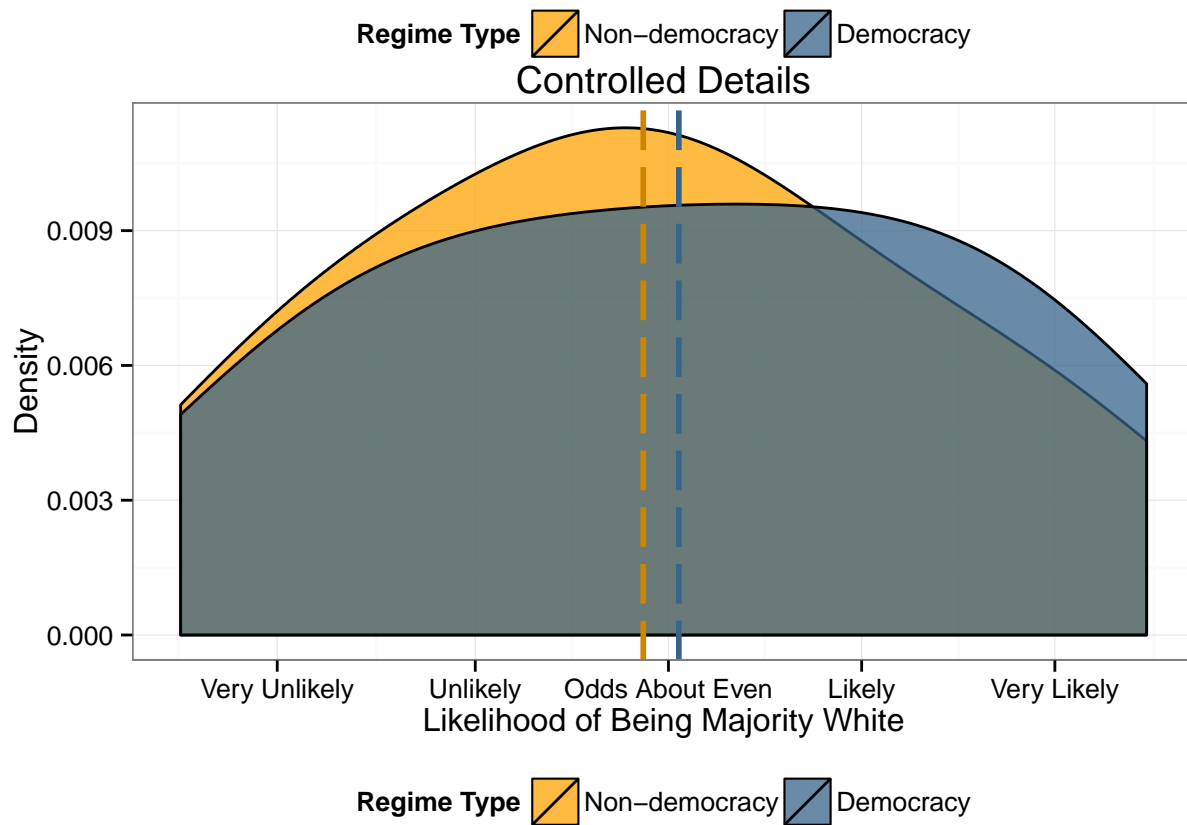
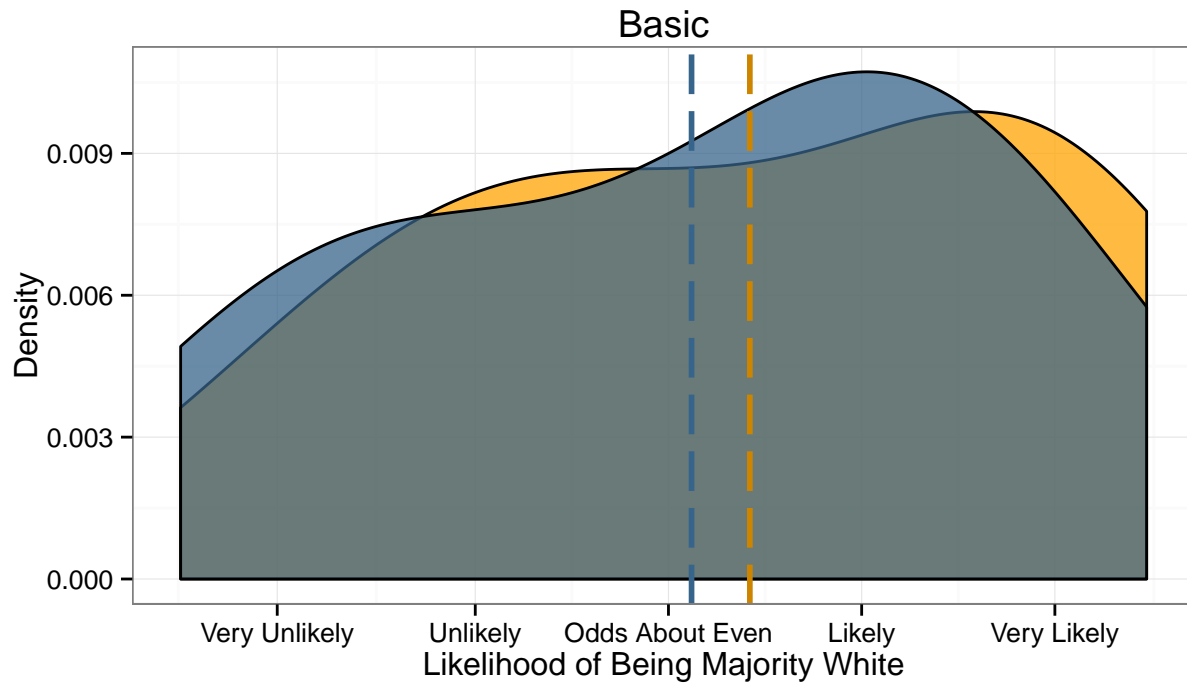
## VENE	-0.034099	0.241015	-0.1415	0.8876
## ZDemocracy:VControlled Details	0.345658	0.354124	0.9761	0.3302
## ZDemocracy:VENE	0.064960	0.355792	0.1826	0.8553

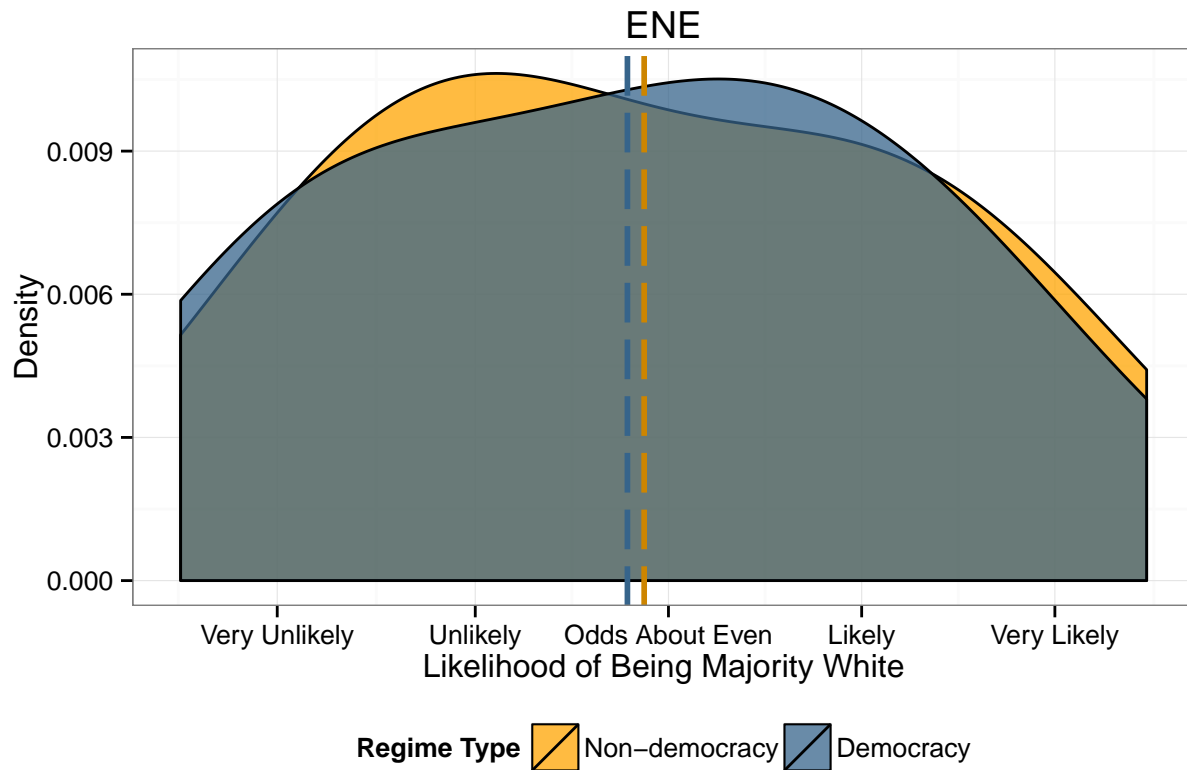




```
## [1] "Placebo Test F: Oil Reserves"
##           [,1]      [,2]
## [1,] -0.4076571 0.2486310
## [2,] -0.1647790 0.2499047
## [3,] -0.3692040 0.2462073
##           [,1]      [,2]
## [1,] 11.766572 7.201284
## [2,]  4.681066 7.238951
## [3,] 10.790553 7.147319
##
## t test of coefficients:
##
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)    45.53030    5.02989   9.0520  <2e-16 ***
## ZDemocracy     11.76657    7.20128   1.6340   0.1039
## VControlled Details  4.89157    6.92716   0.7061   0.4810
## VENE           0.59091    7.42386   0.0796   0.9366
## ZDemocracy:VControlled Details -7.08551   10.21082  -0.6939   0.4886
## ZDemocracy:VENE    -0.97602   10.14607  -0.0962   0.9235
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## t test of coefficients:
##
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)    0.200693   0.173373   1.1576   0.2485
## ZDemocracy     -0.407657   0.248631  -1.6396   0.1027
## VControlled Details -0.115807   0.238905  -0.4847   0.6284
```

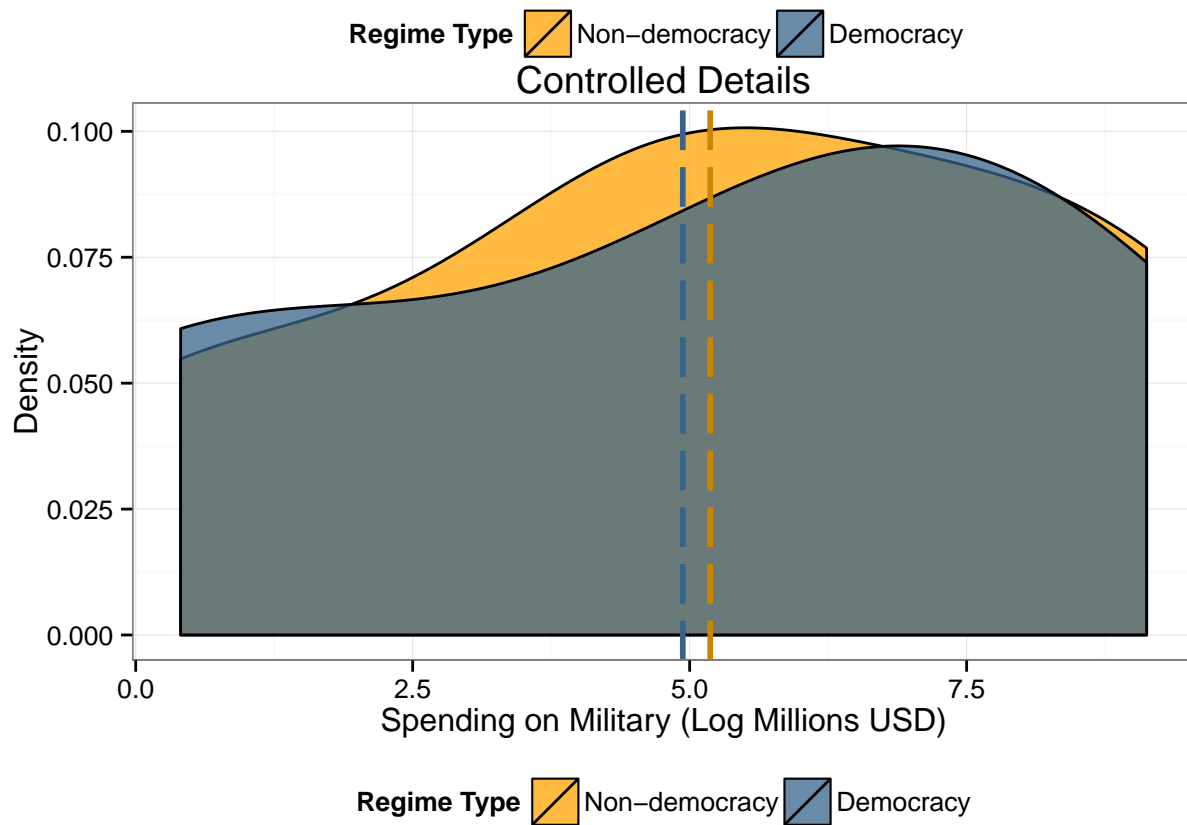
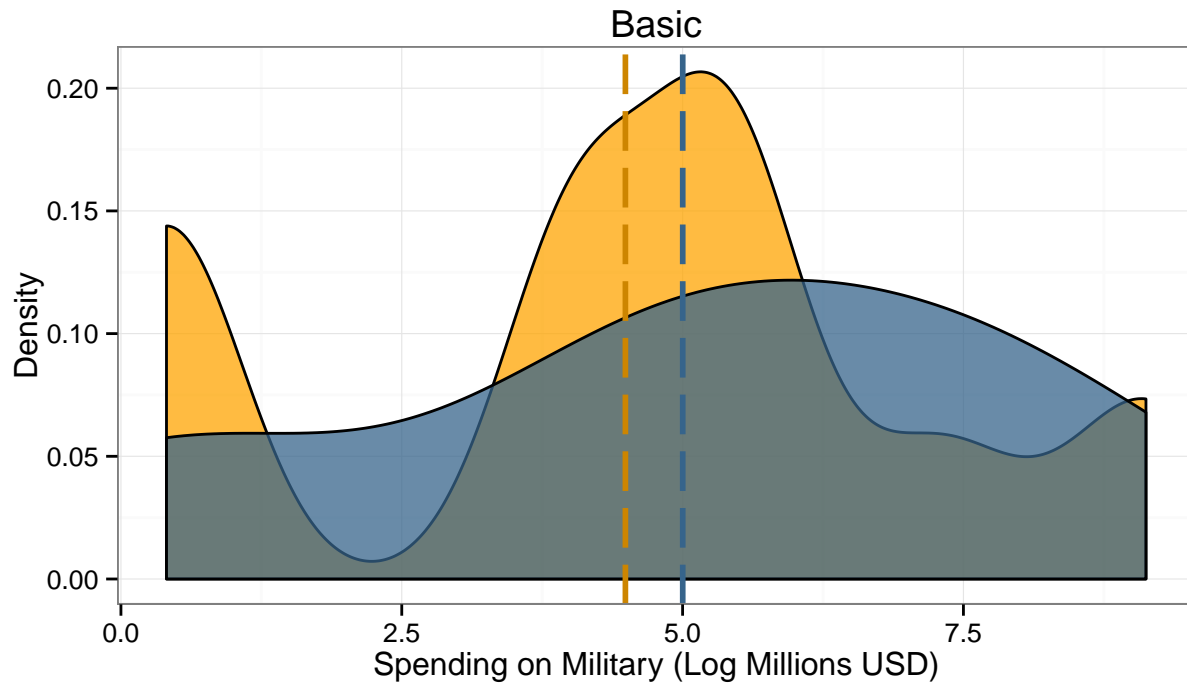
## VENE	-0.013335	0.255691	-0.0522	0.9585
## ZDemocracy:VControlled Details	0.242878	0.352519	0.6890	0.4917
## ZDemocracy:VENE	0.038453	0.349908	0.1099	0.9126

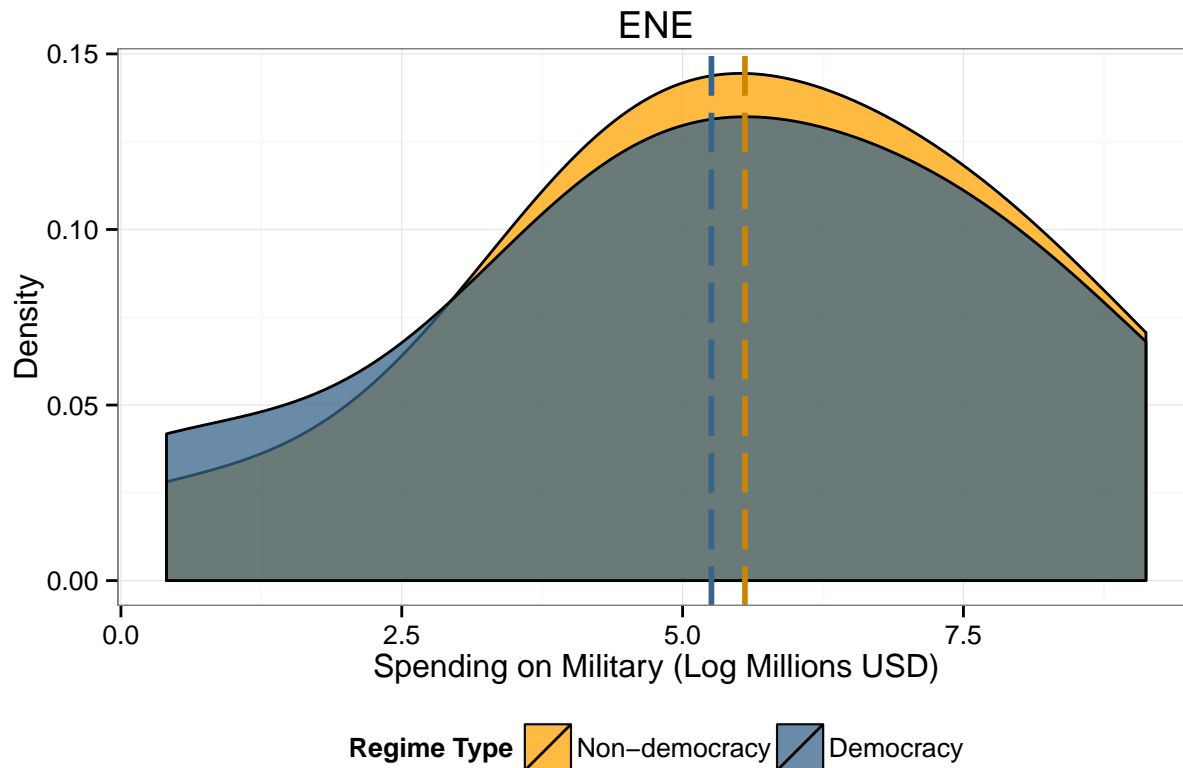




```
## [1] "Placebo Test G: White"
##           [,1]      [,2]
## [1,] -0.20233728 0.2526181
## [2,]  0.12857638 0.2510474
## [3,] -0.06263601 0.2498651
##           [,1]      [,2]
## [1,] -6.033617  7.532971
## [2,]  3.682904  7.190930
## [3,] -1.734848  6.920589
##
## t test of coefficients:
##
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)      58.9242     5.3234  11.0688  <2e-16 ***
## ZDemocracy        -6.0336     7.5330  -0.8010   0.4241
## VControlled Details -11.0336     7.3061  -1.5102   0.1326
## VENE             -10.9394     7.2519  -1.5085   0.1331
## ZDemocracy:VControlled Details  9.7165    10.4142   0.9330   0.3520
## ZDemocracy:VENE       4.2988    10.2294   0.4202   0.6748
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## t test of coefficients:
##
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)      0.099612   0.178521   0.5580   0.5775
## ZDemocracy       -0.202337   0.252618  -0.8010   0.4241
## VControlled Details -0.165849   0.249779  -0.6640   0.5075
```

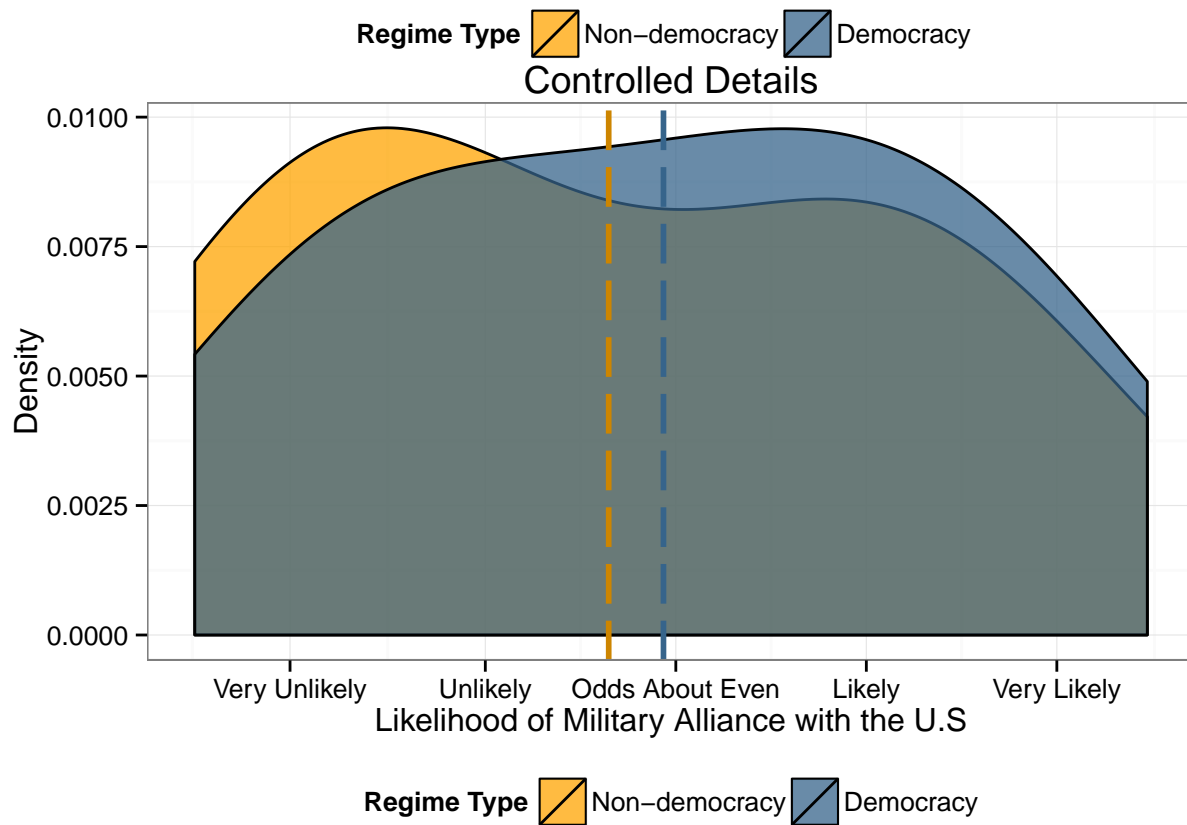
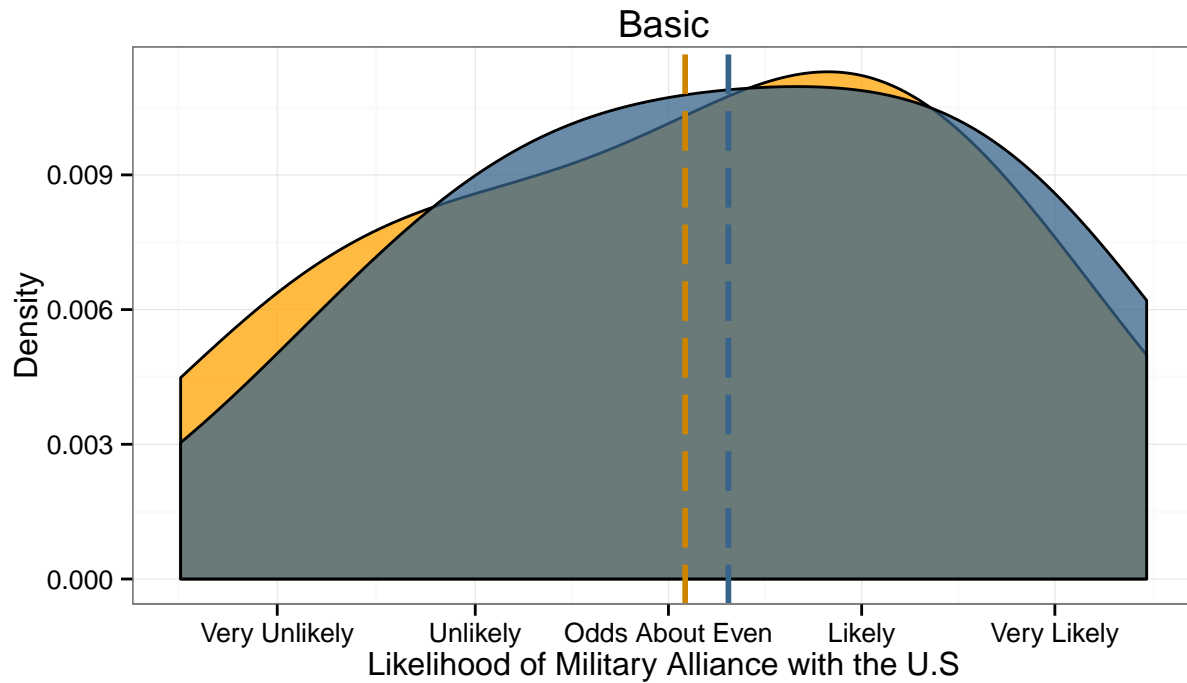
## VENE	-0.067827	0.251956	-0.2692	0.7881
## ZDemocracy:VControlled Details	0.330914	0.356147	0.9291	0.3540
## ZDemocracy:VENE	0.139701	0.355315	0.3932	0.6946

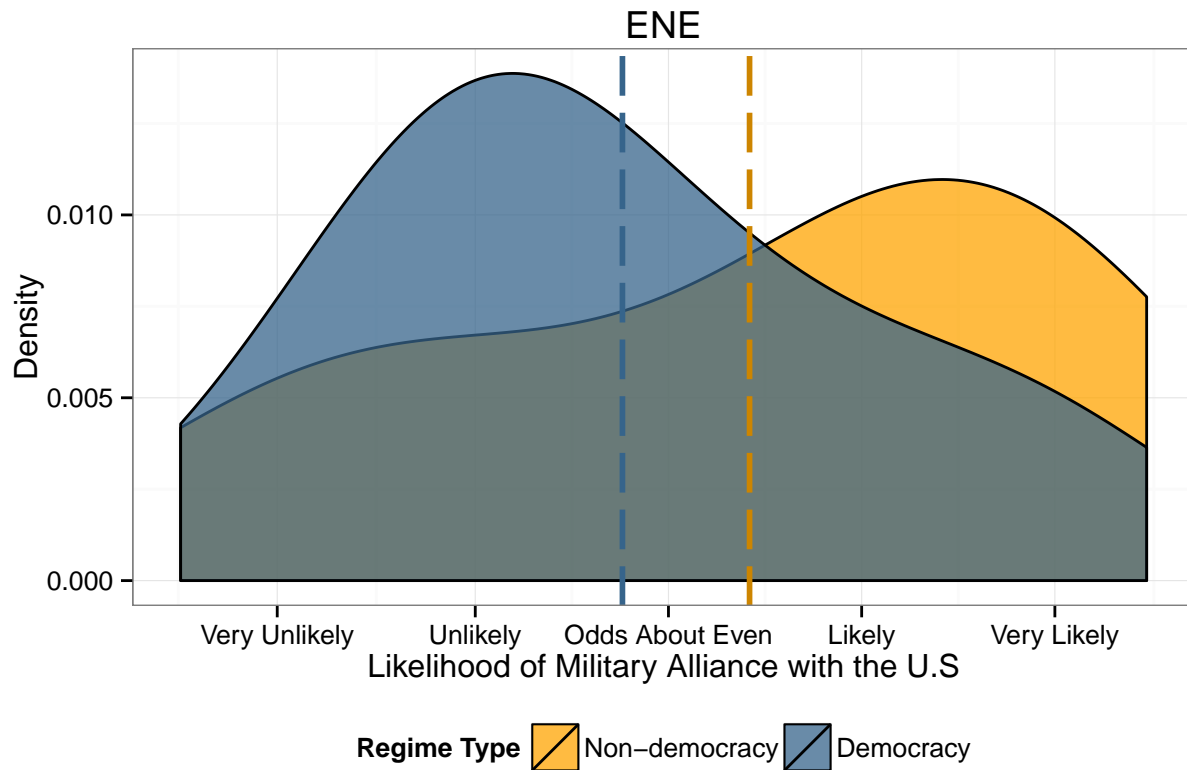




```
## [1] "Placebo Test H: Military Capability"
##           [,1]      [,2]
## [1,]  0.08493721 0.2537556
## [2,] -0.13166803 0.2526287
## [3,] -0.01842706 0.2500269
##           [,1]      [,2]
## [1,]  251.80161 752.2741
## [2,] -480.00092 920.9678
## [3,] -53.27406 722.8472
##
## t test of coefficients:
##
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)    1331.15     528.50   2.5187  0.01259 *
## ZDemocracy       251.80     752.27   0.3347  0.73820
## VControlled Details 1206.61     881.11   1.3694  0.17246
## VENE            261.17     739.69   0.3531  0.72442
## ZDemocracy:VControlled Details -731.80    1189.16 -0.6154  0.53902
## ZDemocracy:VENE    -305.08    1043.28 -0.2924  0.77028
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## t test of coefficients:
##
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)   -0.041815   0.178272 -0.2346  0.8148
## ZDemocracy     0.084937   0.253756  0.3347  0.7382
## VControlled Details 0.109644  0.263022  0.4169  0.6772
```

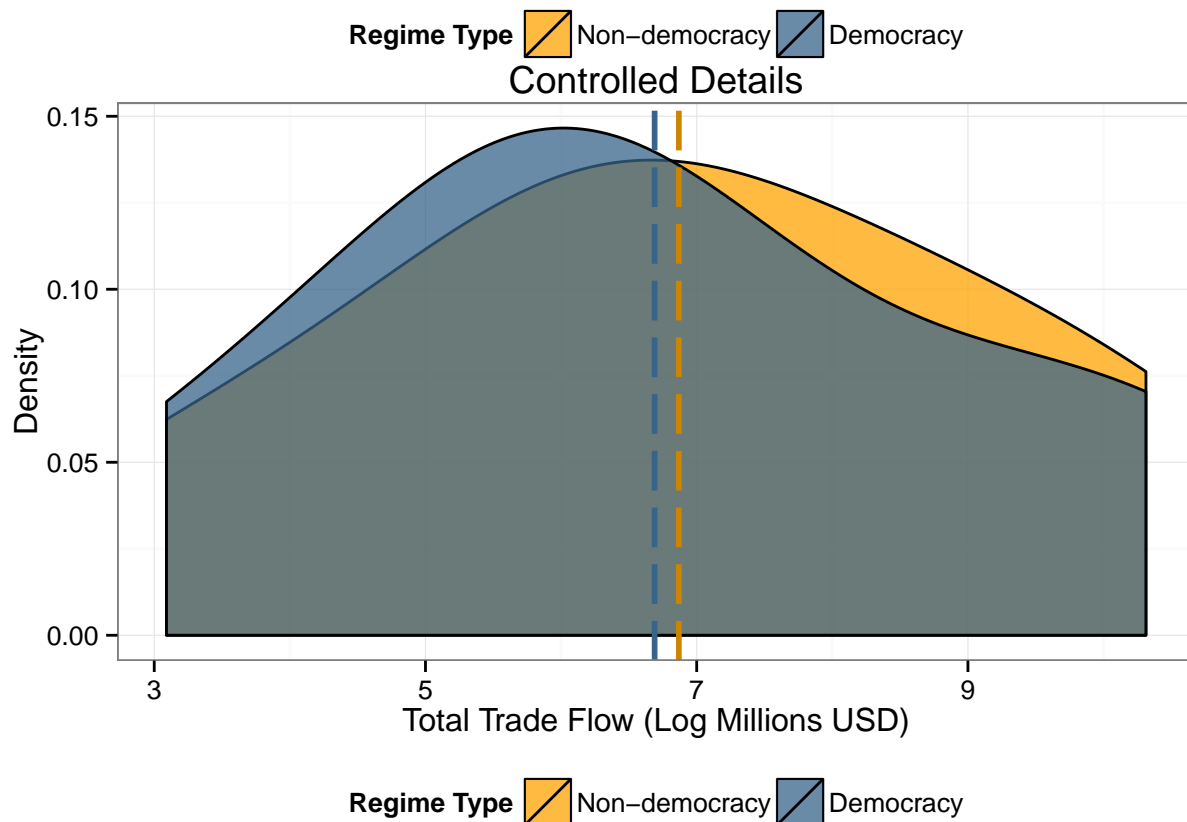
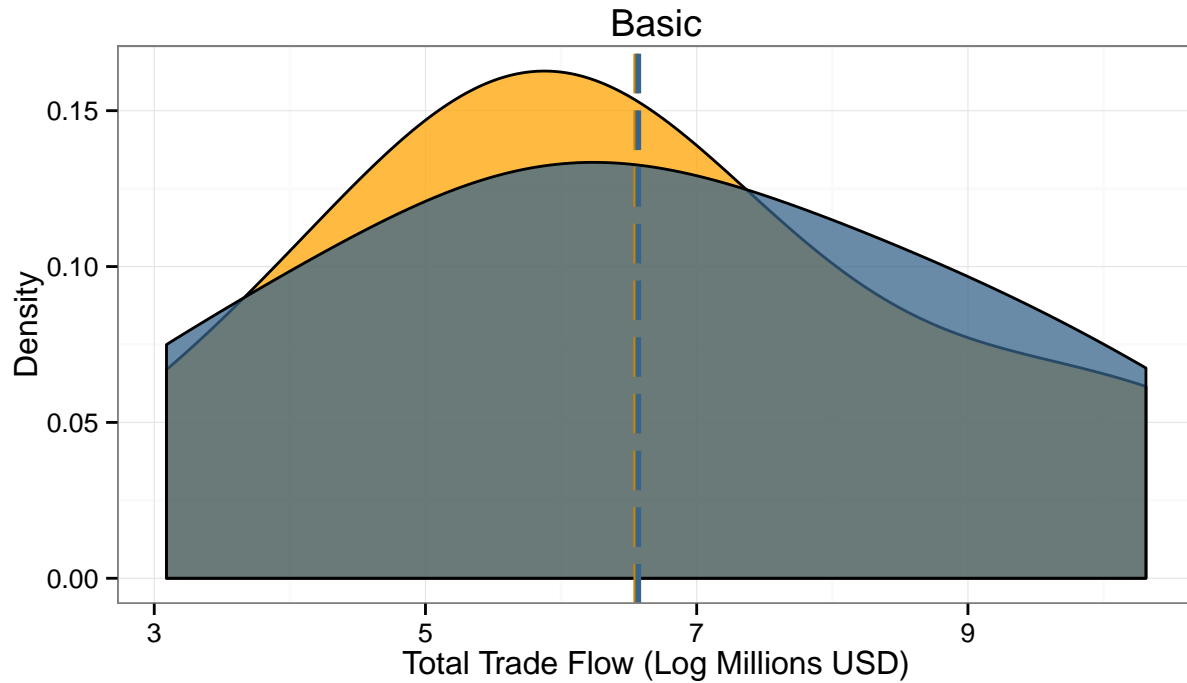
## VENE	0.051166	0.252635	0.2025	0.8397
## ZDemocracy:VControlled Details	-0.216605	0.358069	-0.6049	0.5459
## ZDemocracy:VENE	-0.103364	0.356238	-0.2902	0.7720

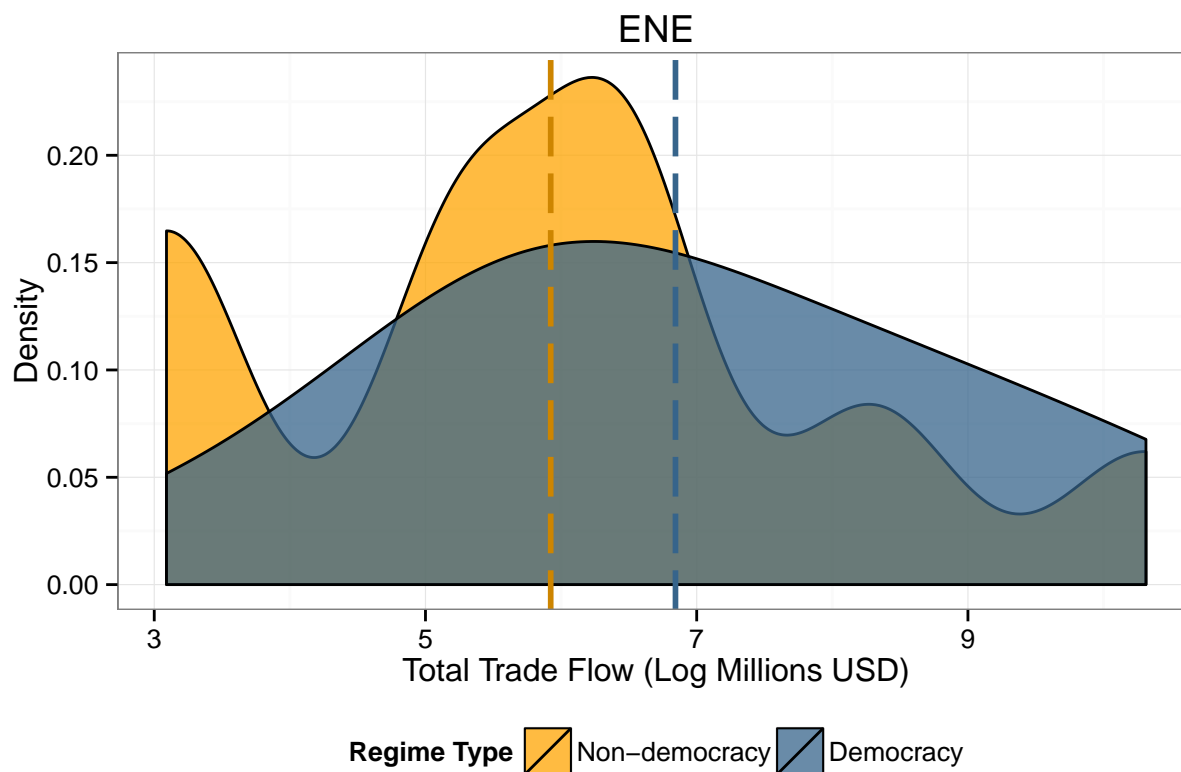




```
## [1] "Placebo Test I: Military Alliance"
##      [,1]      [,2]
## [1,] 0.1652385 0.2529708
## [2,] 0.1931431 0.2511993
## [3,] -0.4574741 0.2440324
##      [,1]      [,2]
## [1,]  4.475852 6.852277
## [2,]  5.752757 7.481958
## [3,] -13.158645 7.019275
##
## t test of coefficients:
##
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)    52.2273     4.8957 10.6680 < 2e-16 ***
## ZDemocracy      4.4759     6.8523  0.6532  0.51441
## VControlled Details -8.7741     7.3480 -1.1941  0.23391
## VENE            6.6667     7.3460  0.9075  0.36527
## ZDemocracy:VControlled Details  1.2769    10.1456  0.1259  0.89998
## ZDemocracy:VENE   -17.6345     9.8094 -1.7977  0.07379 .
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## t test of coefficients:
##
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)   -0.081348    0.180738 -0.4501  0.65315
## ZDemocracy      0.165238    0.252971  0.6532  0.51441
## VControlled Details -0.018150    0.257896 -0.0704  0.94397
```

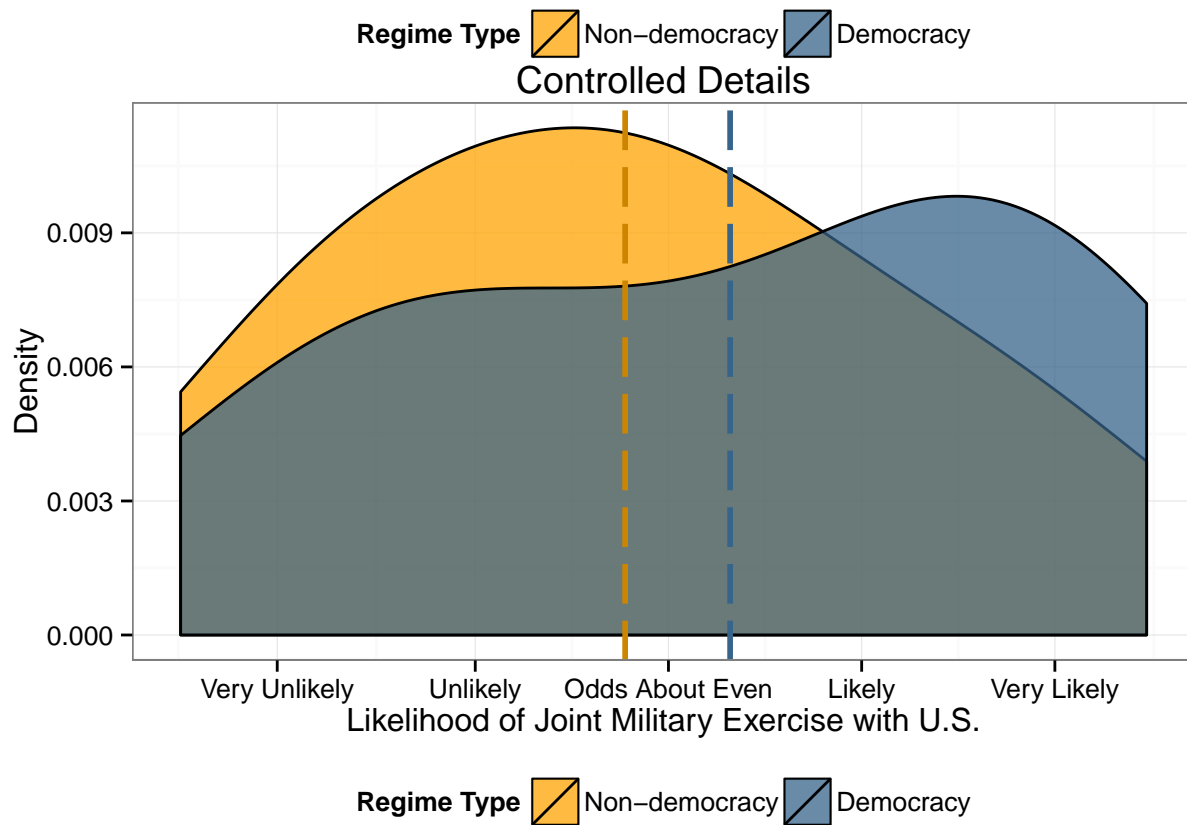
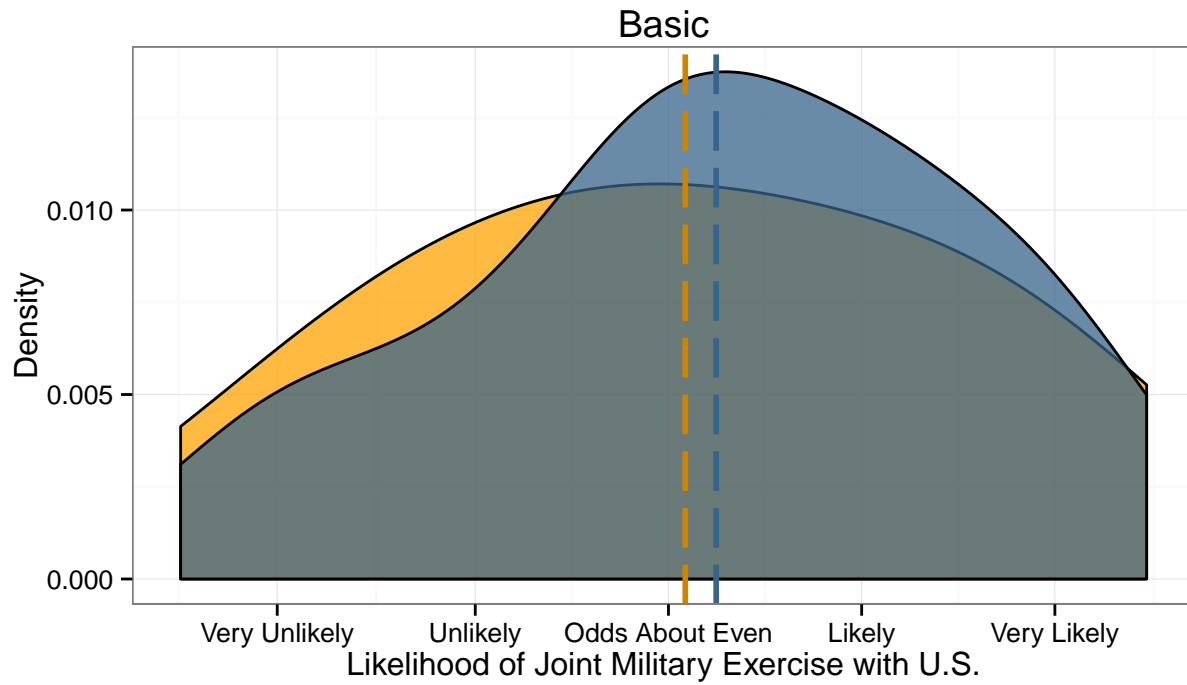
```
## VENE          0.313499    0.262531    1.1941    0.23390
## ZDemocracy:VControlled Details  0.027905    0.356504    0.0783    0.93769
## ZDemocracy:VENE      -0.622713    0.351491   -1.7716    0.07804 .
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

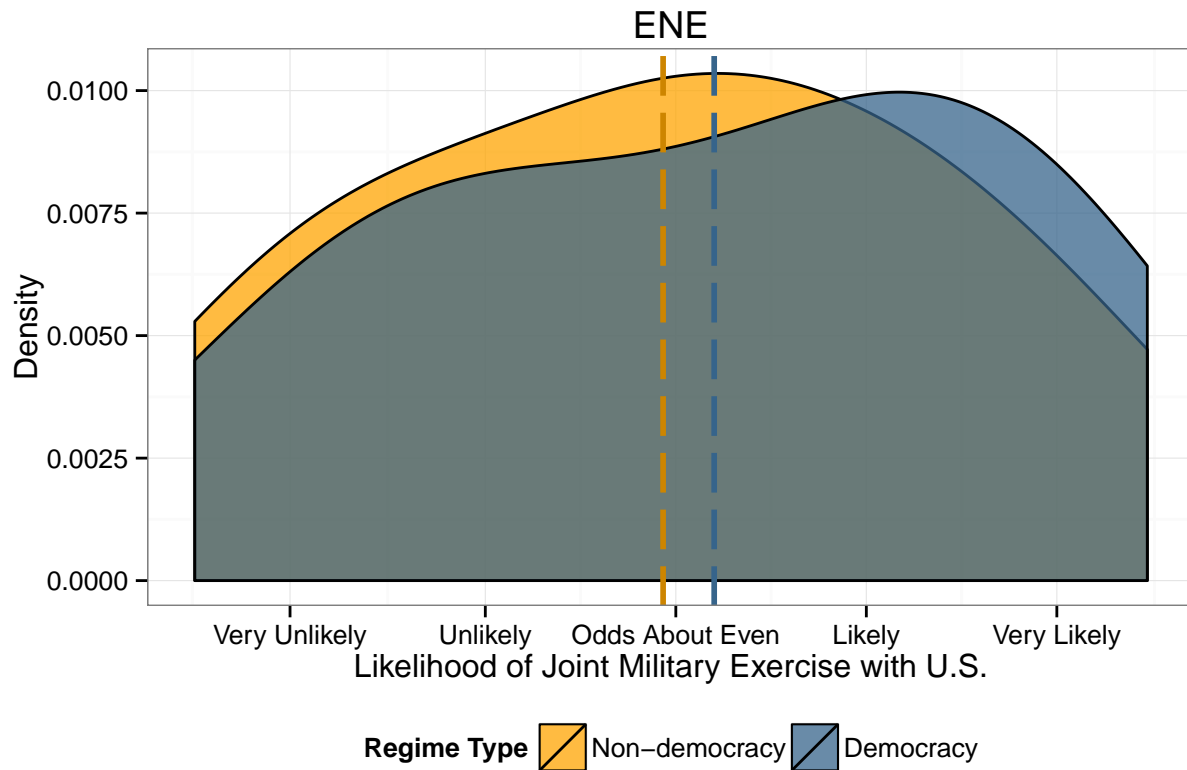




```
## [1] "Placebo Test J: Trade with the U.S."
##           [,1]      [,2]
## [1,] -0.02910450 0.2536858
## [2,]  0.01445917 0.2516975
## [3,]  0.22183651 0.2477203
##           [,1]      [,2]
## [1,] -322.4503 2810.599
## [2,]  169.1992 2945.329
## [3,] 2127.7175 2375.978
##
## t test of coefficients:
##
##               Estimate Std. Error t value Pr(>|t|)
## (Intercept)      6093.96   2041.75   2.9847 0.003208 **
## ZDemocracy       -322.45   2810.60  -0.1147 0.908782
## VControlled Details    645.07   2905.31   0.2220 0.824526
## VENE             -2624.60   2550.56  -1.0290 0.304760
## ZDemocracy:VControlled Details    491.65   4071.17   0.1208 0.904004
## ZDemocracy:VENE       2450.17   3680.32   0.6657 0.506371
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## t test of coefficients:
##
##               Estimate Std. Error t value Pr(>|t|)
## (Intercept)      0.014328   0.184289   0.0777  0.9381
## ZDemocracy       -0.029104   0.253686  -0.1147  0.9088
## VControlled Details -0.021777   0.255266  -0.0853  0.9321
```

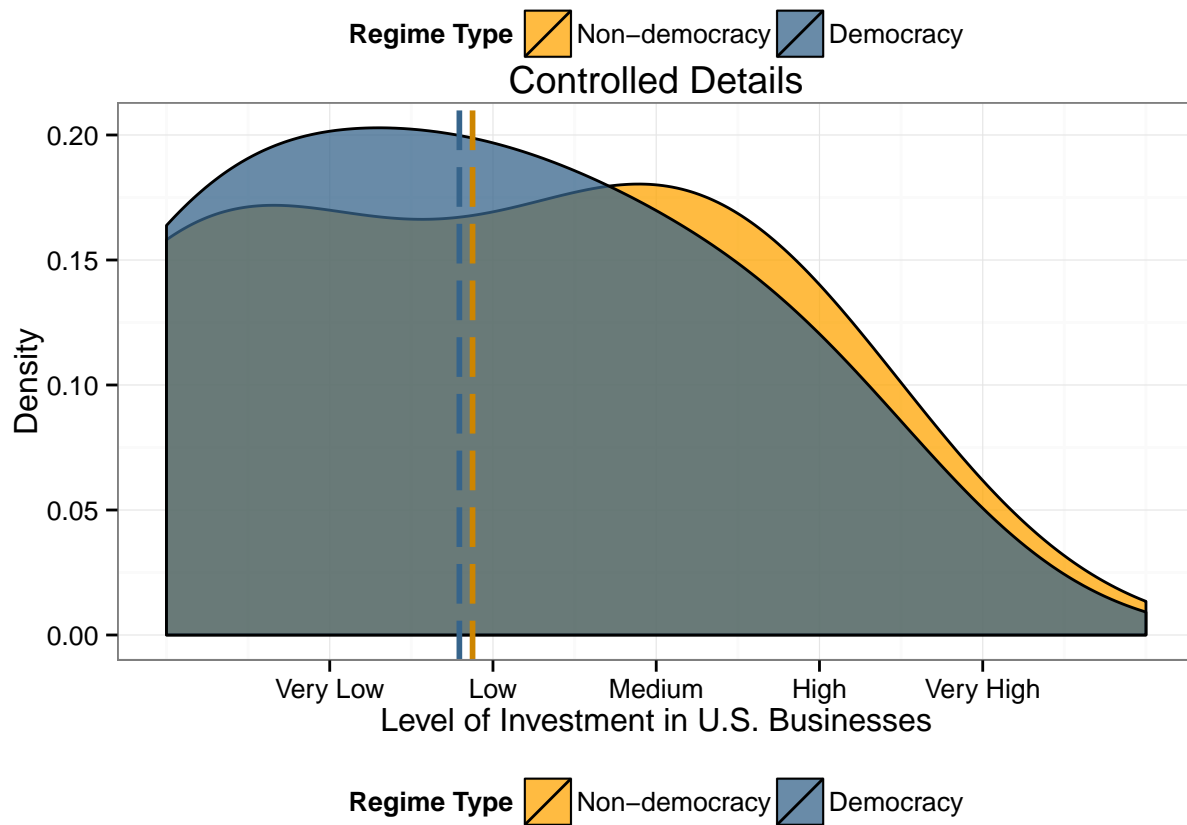
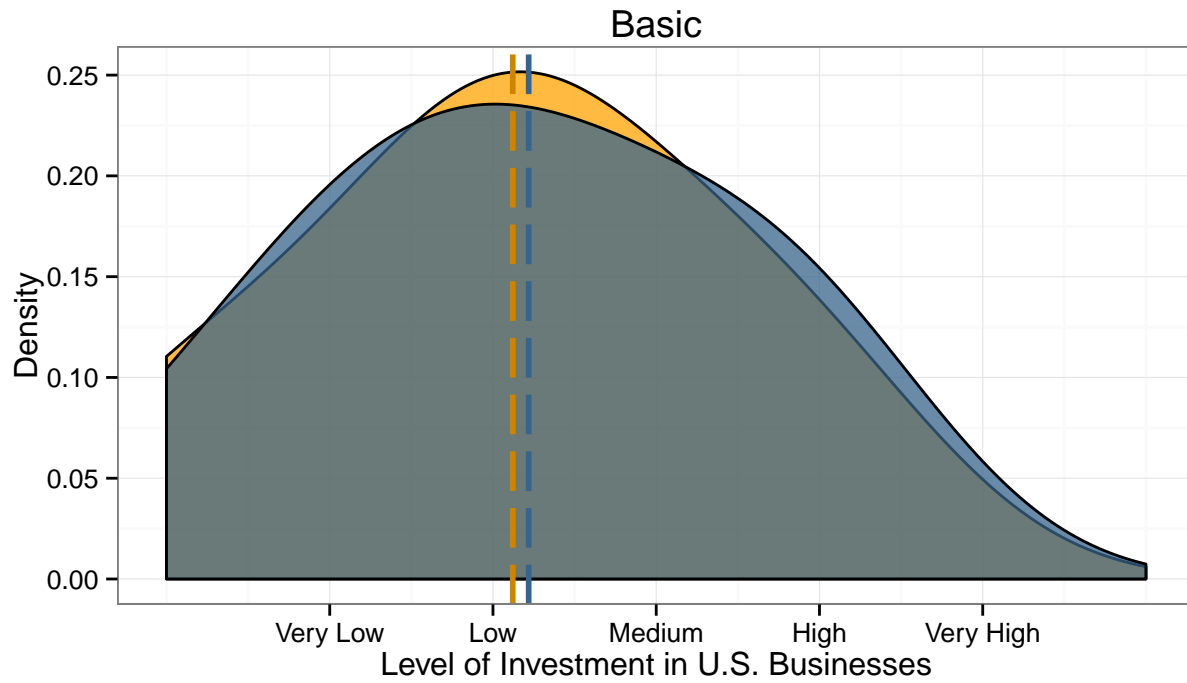
## VENE	-0.126902	0.243643	-0.5209	0.6031
## ZDemocracy:VControlled Details	0.043564	0.357363	0.1219	0.9031
## ZDemocracy:VENE	0.250941	0.354573	0.7077	0.4800

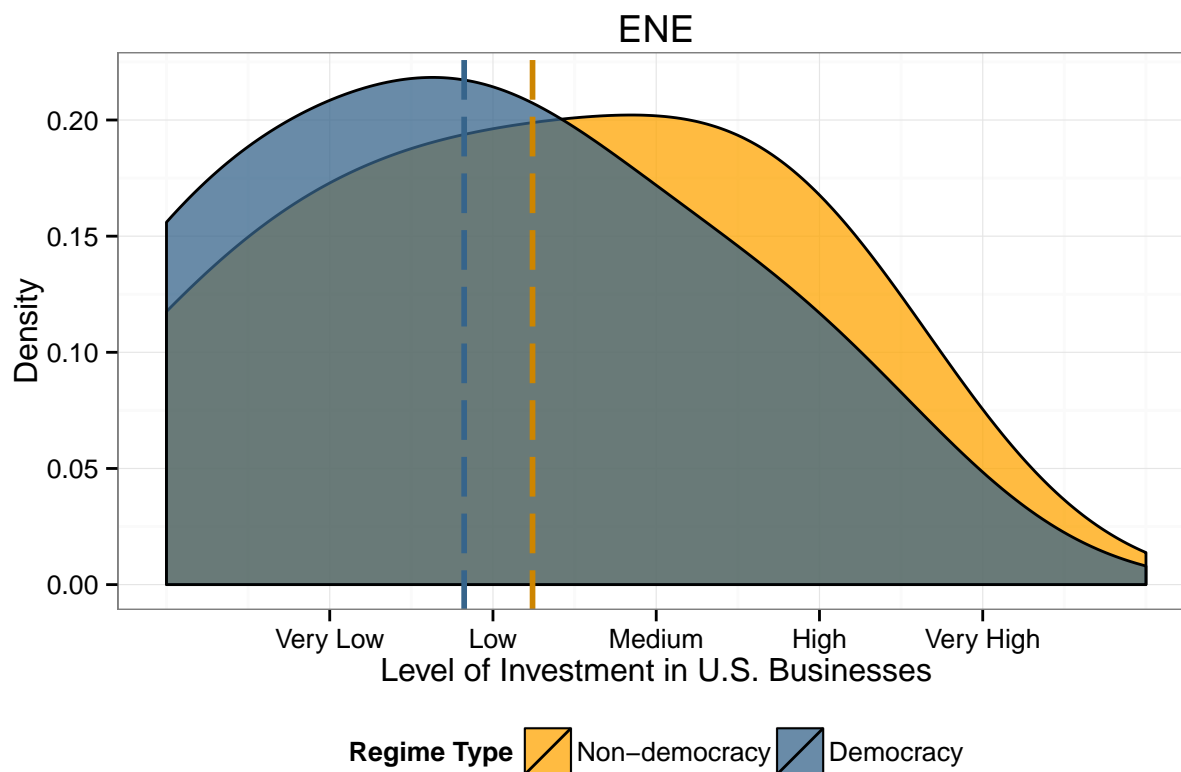




```
## [1] "Placebo Test K: Joint Military Exercise"
##      [,1]      [,2]
## [1,] 0.1206982 0.2532047
## [2,] 0.3636525 0.2467163
## [3,] 0.1827483 0.2487917
##      [,1]      [,2]
## [1,]  3.195076 6.702737
## [2,] 10.866728 7.372421
## [3,]  5.362745 7.300786
##
## t test of coefficients:
##
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)    52.2424    4.8915 10.6802  <2e-16 ***
## ZDemocracy       3.1951    6.7027  0.4767  0.6341
## VControlled Details -6.2268    6.9360 -0.8978  0.3704
## VENE            -3.0758    7.0686 -0.4351  0.6640
## ZDemocracy:VControlled Details  7.6717    9.9639  0.7699  0.4423
## ZDemocracy:VENE      2.1677    9.9110  0.2187  0.8271
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
##
## t test of coefficients:
##
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)   -0.059421   0.184783 -0.3216  0.7481
## ZDemocracy     0.120698   0.253205  0.4767  0.6341
## VControlled Details -0.127915   0.247437 -0.5170  0.6058
```

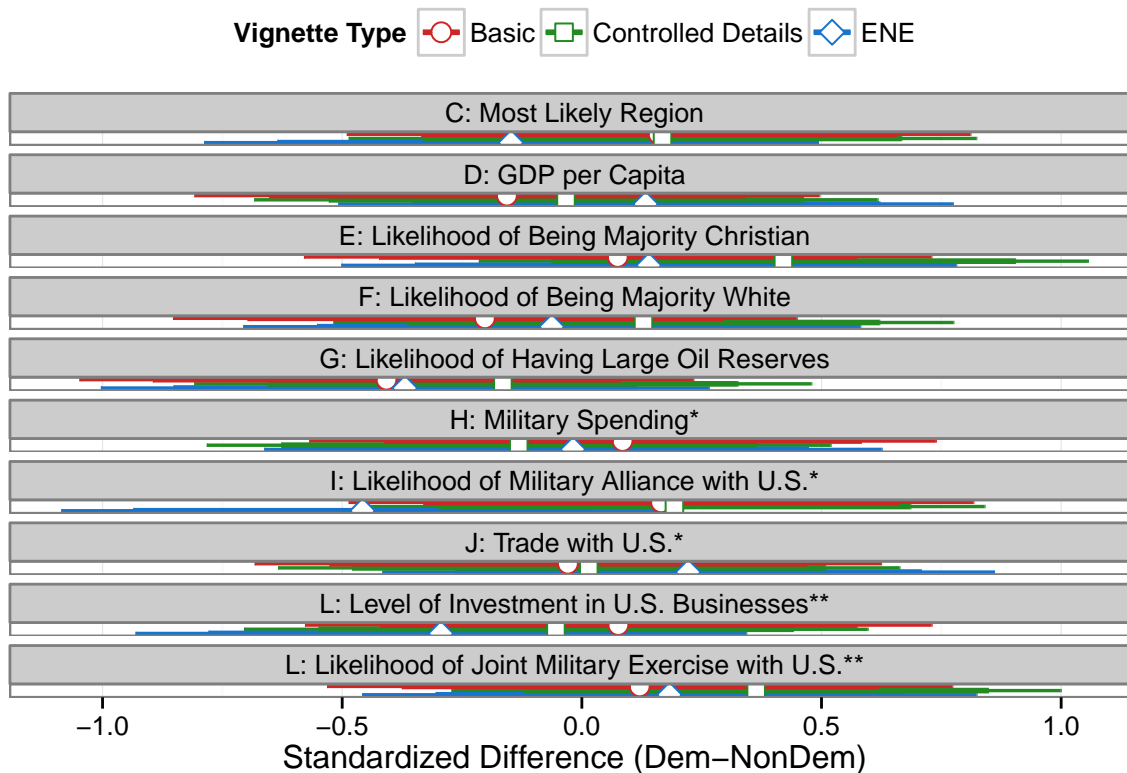
## VENE	-0.033317	0.253737	-0.1313	0.8957
## ZDemocracy:VControlled Details	0.242954	0.353527	0.6872	0.4928
## ZDemocracy:VENE	0.062050	0.354979	0.1748	0.8614





```
## [1] "Placebo Test L: Foreign Direct Investment"
##           [,1]      [,2]
## [1,]  0.07609962 0.2537989
## [2,] -0.05412239 0.2525435
## [3,] -0.29405010 0.2473334
##           [,1]      [,2]
## [1,]  0.09753788 0.3252974
## [2,] -0.08088235 0.3774096
## [3,] -0.41889483 0.3523437
##
## t test of coefficients:
##
##               Estimate Std. Error t value Pr(>|t|)
## (Intercept)    2.121212   0.228606   9.2789  <2e-16 ***
## ZDemocracy      0.097538   0.325297   0.2998   0.7646
## VControlled Details -0.246212   0.361697  -0.6807   0.4969
## VENE            0.121212   0.341721   0.3547   0.7232
## ZDemocracy:VControlled Details -0.178420   0.498253  -0.3581   0.7207
## ZDemocracy:VENE    -0.516433   0.479546  -1.0769   0.2829
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## t test of coefficients:
##
##               Estimate Std. Error t value Pr(>|t|)
## (Intercept)   -0.037464   0.178360  -0.2100   0.8339
## ZDemocracy     0.076100   0.253799   0.2998   0.7646
## VControlled Details 0.065346   0.258825   0.2525   0.8009
```

```
## VENE          0.186684  0.252193  0.7402  0.4601
## ZDemocracy:VControlled Details -0.130222  0.358039 -0.3637  0.7165
## ZDemocracy:VENE -0.370150  0.354384 -1.0445  0.2976
```



```
## [1] "Joint Test"
## Linear hypothesis test (Chi^2 statistic of a Wald test)
##
## Hypothesis:
## r.c_ZDemocracy = 0
## r.d_ZDemocracy = 0
## r.e_ZDemocracy = 0
## r.f_ZDemocracy = 0
## r.g_ZDemocracy = 0
## r.h_ZDemocracy = 0
## r.i_ZDemocracy = 0
## r.j_ZDemocracy = 0
## r.k_ZDemocracy = 0
## r.l_ZDemocracy = 0
##
## Model 1: restricted model
## Model 2: fitsur
##
##   Res.Df Df  Chisq Pr(>Chisq)
## 1      640
## 2      630 10 5.2278    0.8755
## [1] "Joint Test"
## Linear hypothesis test (Chi^2 statistic of a Wald test)
##
```

```

## Hypothesis:
## r.c_ZDemocracy = 0
## r.d_ZDemocracy = 0
## r.e_ZDemocracy = 0
## r.f_ZDemocracy = 0
## r.g_ZDemocracy = 0
## r.h_ZDemocracy = 0
## r.i_ZDemocracy = 0
## r.j_ZDemocracy = 0
## r.k_ZDemocracy = 0
## r.l_ZDemocracy = 0
##
## Model 1: restricted model
## Model 2: fitsur
##
##   Res.Df Df   Chisq Pr(>Chisq)
## 1      650
## 2      640 10 7.3646      0.6906
## [1] "Joint Test"
## Linear hypothesis test (Chi^2 statistic of a Wald test)
##
## Hypothesis:
## r.c_ZDemocracy = 0
## r.d_ZDemocracy = 0
## r.e_ZDemocracy = 0
## r.f_ZDemocracy = 0
## r.g_ZDemocracy = 0
## r.h_ZDemocracy = 0
## r.i_ZDemocracy = 0
## r.j_ZDemocracy = 0
## r.k_ZDemocracy = 0
## r.l_ZDemocracy = 0
##
## Model 1: restricted model
## Model 2: fitsur
##
##   Res.Df Df   Chisq Pr(>Chisq)
## 1      660
## 2      650 10 9.8588      0.453
## [1] "Treatment Measures"
##           [,1]      [,2]
## [1,] -0.3308519 0.4249397
## [2,]  0.1981326 0.4214983
## [3,] -0.2430484 0.4168359
##           [,1]      [,2]
## [1,] -0.4895833 0.3419870
## [2,] -0.1783088 0.3518564
## [3,]  0.1256684 0.3627364
## [1] "IV"
##           [,1]      [,2]
## [1,] -1.952295 4.374428
## [2,] -1.555698 4.255146
## [3,] -2.320928 4.736104
##           [,1]      [,2]

```

```

## [1,] -1.216442 1.898364
## [2,] -1.363837 3.567633
## [3,] -1.976529 3.641081
## [1] "Balance Tests"
##
## t test of coefficients:
##
##           Estimate Std. Error t value Pr(>|t|)
## (Intercept)  0.535714   0.097740   5.4810 7.924e-07 ***
## college      -0.076255   0.129010  -0.5911   0.5566
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
##
## t test of coefficients:
##
##           Estimate Std. Error t value Pr(>|t|)
## (Intercept)  0.469388   0.072780   6.4494 1.802e-08 ***
## democrat     0.093112   0.150986   0.6167   0.5397
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
##
## t test of coefficients:
##
##           Estimate Std. Error t value Pr(>|t|)
## (Intercept)  0.4234636  0.1603617   2.6407  0.01042 *
## age_num      0.0012510  0.0026925   0.4646  0.64380
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
##
## t test of coefficients:
##
##           Estimate Std. Error t value Pr(>|t|)
## (Intercept)  0.456522   0.075074   6.0810 7.727e-08 ***
## male         0.122426   0.141177   0.8672   0.3891
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
##
## t test of coefficients:
##
##           Estimate Std. Error t value Pr(>|t|)
## (Intercept)  0.527931   0.126370   4.1777 9.237e-05 ***
## poliid_1     -0.011577   0.036090  -0.3208   0.7494
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
##
## Call:
##   felm(formula = as.numeric(Z) - 1 ~ college + democrat + age_num +
##         male + poliid_1, data = d[
##
## Residuals:

```



```

##      Min      1Q  Median      3Q      Max
## -0.6265 -0.4652 -0.3596  0.4945  0.6522
##
## Coefficients:
##              Estimate Robust s.e t value Pr(>|t|)
## (Intercept)  0.427726   0.216415   1.976  0.0528 .
## college      -0.072347   0.133414  -0.542  0.5897
## democrat     0.084590   0.147556   0.573  0.5686
## age_num       0.001204   0.002731   0.441  0.6610
## male          0.119467   0.138189   0.865  0.3908
## poliid_1     -0.005272   0.036820  -0.143  0.8866
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.5174 on 59 degrees of freedom
## Multiple R-squared(full model): 0.02765   Adjusted R-squared: -0.05476
## Multiple R-squared(proj model): 0.02765   Adjusted R-squared: -0.05476
## F-statistic(full model, *iid*):0.3355 on 5 and 59 DF, p-value: 0.8894
## F-statistic(proj model): 0.389 on 5 and 59 DF, p-value: 0.8544
##
##
## [1] "Balance Tests"
##
## t test of coefficients:
##
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  0.483871   0.092748  5.2171 2.093e-06 ***
## college      0.058986   0.126948  0.4646  0.6438
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
##
## t test of coefficients:
##
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  0.510638   0.074501  6.8541 3.352e-09 ***
## democrat     0.015677   0.142022  0.1104  0.9124
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
##
## t test of coefficients:
##
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  0.431482   0.160594  2.6868 0.009181 **
## age_num       0.001471   0.002573  0.5717 0.569520
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
##
## t test of coefficients:
##
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  0.512821   0.082144  6.2429 3.876e-08 ***

```

```

## male          0.005698   0.129302  0.0441    0.965
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
##
## t test of coefficients:
##
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  0.563989   0.122915  4.5884 2.137e-05 ***
## poliid_1     -0.016362   0.035270 -0.4639  0.6443
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
##
## Call:
## felm(formula = as.numeric(Z) - 1 ~ college + democrat + age_num + male + poliid_1, data = d[
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.6033 -0.5022  0.3609  0.4750  0.5922
##
## Coefficients:
##              Estimate Robust s.e t value Pr(>|t|)
## (Intercept)  0.4501921  0.2176995   2.068  0.043 *
## college      0.0492732  0.1369000   0.360  0.720
## democrat     0.0008204  0.1490234   0.006  0.996
## age_num      0.0014958  0.0027227   0.549  0.585
## male         0.0237794  0.1398577   0.170  0.866
## poliid_1     -0.0188332  0.0356610  -0.528  0.599
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.5209 on 60 degrees of freedom
## Multiple R-squared(full model): 0.0123 Adjusted R-squared: -0.07001
## Multiple R-squared(proj model): 0.0123 Adjusted R-squared: -0.07001
## F-statistic(full model, *iid*):0.1494 on 5 and 60 DF, p-value: 0.9795
## F-statistic(proj model): 0.1609 on 5 and 60 DF, p-value: 0.9758
##
##
## [1] "Balance Tests"
##
## t test of coefficients:
##
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  0.562500   0.090524  6.2138 4.138e-08 ***
## college      -0.105357   0.125332 -0.8406  0.4036
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
##
## t test of coefficients:
##
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept)  0.442308   0.070225  6.2984 2.95e-08 ***

```

```

## democrat    0.291026    0.141059    2.0632    0.0431 *
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
##
## t test of coefficients:
##
##             Estimate Std. Error t value Pr(>|t|)
## (Intercept) 0.4235289  0.1795327   2.3591  0.02134 *
## age_num      0.0013875  0.0027748   0.5000  0.61873
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
##
## t test of coefficients:
##
##             Estimate Std. Error t value Pr(>|t|)
## (Intercept) 0.487179   0.082144   5.9308 1.273e-07 ***
## male         0.048535   0.127675   0.3801  0.7051
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
##
## t test of coefficients:
##
##             Estimate Std. Error t value Pr(>|t|)
## (Intercept) 0.461395   0.118568   3.8914 0.0002373 ***
## poliid_1    0.015748   0.034413   0.4576 0.6487654
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
##
## Call:
##   felm(formula = as.numeric(Z) - 1 ~ college + democrat + age_num +      male + poliid_1, data = d[
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.8156 -0.4422  0.1260  0.4905  0.6945
##
## Coefficients:
##             Estimate Robust s.e t value Pr(>|t|)
## (Intercept)  0.323189   0.212291   1.522   0.1331
## college      -0.093117   0.124382  -0.749   0.4570
## democrat      0.302628   0.136783   2.212   0.0307 *
## age_num       0.001286   0.002910   0.442   0.6600
## male          0.040964   0.127336   0.322   0.7488
## poliid_1      0.024005   0.034658   0.693   0.4912
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.502 on 61 degrees of freedom
## Multiple R-squared(full model): 0.08189   Adjusted R-squared: 0.006631
## Multiple R-squared(proj model): 0.08189   Adjusted R-squared: 0.006631
## F-statistic(full model, *iid*):1.088 on 5 and 61 DF, p-value: 0.3761

```

```
## F-statistic(proj model): 1.299 on 5 and 61 DF, p-value: 0.2762
```

```
## [1] "All the code ran without error."
```