Statistics/Data Analysis

```
      name:  <unnamed>
       log:  F:\fiscal research\mayor\PSRM data\PSRM_descstat1_log.smcl
  log type:  smcl
 opened on:  19 Dec 2023, 11:17:29

1 .
2 . ** Log file for Analysis: Figure 1, Figure A.4, Figure A.5, Table B.1 **
3 .
4 .
5 .
6 . * Figure 1-(a)
7 . sort year_monthD

8 . twoway line fed_act_yr_mth_mil year_monthD, ///
  >         legend(label(1 "Federal Action Obligation")) ///
  >         xscale(noline) yscale(noline)   ///
  >         ytitle("Grant ($ million)") xtitle("Date") ///
  >         ylabel( ,angle(horizontal))     ///
  >         tlabel(01oct2005(365)30sep2021, angle(45),)

9 .
  end of do-file

10. do "C:\Users\heonu\AppData\Local\Temp\STD7864_000000.tmp"

11.
12.
13. * Figure 1-(b)
14. sort award_dept_acr_up

15.
16. graph bar fed_act_agency_mil, ///
  > over (award_dept_acr_up, label(labsize(vsmall) angle(65)) sort(fed_act_agency_mil) d
  > escending) ///
  > legend(label(1 "Grant")) ylabel(,labsize(small)) ytitle("") ///
  > ytitle("Grant ($ million)") b1title("Agency")

17.
  end of do-file

18. do "C:\Users\heonu\AppData\Local\Temp\STD7864_000000.tmp"

19.
20. * Figure A.4
21. sort fed_act_mth_mil

22. graph bar fed_act_mth_mil, ///
  > over (action_date_fiscal_mon, label(labsize(vsmall) angle(65))) ///
  > legend(label(1 "Grant")) ylabel(,labsize(small)) ytitle("") ///
  > ytitle("Grant ($ million)") b1title("Month")

23.
  end of do-file

24. do "C:\Users\heonu\AppData\Local\Temp\STD7864_000000.tmp"

25.
26. drop if cfda_number1==".."
  (154 observations deleted)
```

```
27.
28.
29. bysort awarding_agency_name cfda_number1: keep if _n==1
  (210,261 observations deleted)

30.
31.
32. gen dept=awarding_agency_name

33. replace dept="Others" if inlist(dept, "CORPORATION FOR NATIONAL AND COMMUNITY SERVIC
  > E (CNCS)", "ELECTION ASSISTANCE COMMISSION (EAC)", "EXECUTIVE OFFICE OF THE PRESIDEN
  > T (EOP)")
  (9 real changes made)

34. replace dept="Others" if inlist(dept, "INSTITUTE OF MUSEUM AND LIBRARY SERVICES (IML
  > S)", "NATIONAL AERONAUTICS AND SPACE ADMINISTRATION (NASA)", "NATIONAL ARCHIVES AND
  > RECORDS ADMINISTRATION (NARA)")
  (8 real changes made)

35. replace dept="Others" if inlist(dept, "NATIONAL ENDOWMENT FOR THE ARTS (NEA)", "SMAL
  > L BUSINESS ADMINISTRATION (SBA)", "SOCIAL SECURITY ADMINISTRATION (SSA)", "SURFACE T
  > RANSPORTATION BOARD (STB)")
  (7 real changes made)

36.
37.
38.
39. split dept, p("(")
  variables created as string:
  dept1  dept2

40. split dept2, p(")")
  variable created as string:
  dept21

41.
42.
43.
44. replace dept21="Others" if missing(dept21)
  (24 real changes made)

45.
46. * replace dept21="Others" if inlist(dept21, "DOD", "VA", "TREAS")
47.
48.
49.
50. * Table B.1 - Column 1, 2
51. drop if missing(cfda_number1)
  (0 observations deleted)

52. drop if cfda_number1==".."
  (0 observations deleted)

53.
54.
55. bysort awarding_agency_name cfda_number1: keep if _n==1 // * total number of grants:
  >  701
  (0 observations deleted)

56.
```

```
57. gen grant=1

58.
59. bysort awarding_agency_name: egen grant_count=total(grant)

60.
61. tabstat grant_count, by(awarding_agency_name) stat(n) // column 1
```

Summary for variables: grant_count
by categories of: awarding_agency_name

awarding_agency_name	N
APPALACHIAN REGIONAL	**4**
CONSUMER PRODUCT SAF	**1**
CORPORATION FOR NATI	**7**
DELTA REGIONAL AUTHO	**1**
DENALI COMMISSION (D	**1**
DEPARTMENT OF AGRICU	**48**
DEPARTMENT OF COMMER	**20**
DEPARTMENT OF DEFENS	**18**
DEPARTMENT OF EDUCAT	**68**
DEPARTMENT OF ENERGY	**22**
DEPARTMENT OF HEALTH	**172**
DEPARTMENT OF HOMELA	**28**
DEPARTMENT OF HOUSIN	**42**
DEPARTMENT OF JUSTIC	**76**
DEPARTMENT OF LABOR	**19**
DEPARTMENT OF THE IN	**61**
DEPARTMENT OF THE TR	**3**
DEPARTMENT OF TRANSP	**36**
DEPARTMENT OF VETERA	**3**
ELECTION ASSISTANCE	**1**
ENVIRONMENTAL PROTEC	**54**
EXECUTIVE OFFICE OF	**1**
INSTITUTE OF MUSEUM	**5**
NATIONAL AERONAUTICS	**2**
NATIONAL ARCHIVES AN	**1**
NATIONAL ENDOWMENT F	**1**
SMALL BUSINESS ADMIN	**3**
SOCIAL SECURITY ADMI	**1**
SURFACE TRANSPORTATI	**2**
Total	**701**

```
62.
63. gen grant_count_rat=grant_count/701

64.
65. tabstat grant_count_rat, by(awarding_agency_name) stat(mean) // column 2
```

Summary for variables: grant_count_rat
by categories of: awarding_agency_name

awarding_agency_name	mean
APPALACHIAN REGIONAL	**.0057061**
CONSUMER PRODUCT SAF	**.0014265**
CORPORATION FOR NATI	**.0099857**
DELTA REGIONAL AUTHO	**.0014265**
DENALI COMMISSION (D	**.0014265**
DEPARTMENT OF AGRICU	**.0684736**
DEPARTMENT OF COMMER	**.0285307**
DEPARTMENT OF DEFENS	**.0256776**
DEPARTMENT OF EDUCAT	**.0970043**
DEPARTMENT OF ENERGY	**.0313837**
DEPARTMENT OF HEALTH	**.2453638**
DEPARTMENT OF HOMELA	**.0399429**
DEPARTMENT OF HOUSIN	**.0599144**
DEPARTMENT OF JUSTIC	**.1084165**
DEPARTMENT OF LABOR	**.0271041**

DEPARTMENT OF THE IN	**.0870185**
DEPARTMENT OF THE TR	**.0042796**
DEPARTMENT OF TRANSP	**.0513552**
DEPARTMENT OF VETERA	**.0042796**
ELECTION ASSISTANCE	**.0014265**
ENVIRONMENTAL PROTEC	**.0770328**
EXECUTIVE OFFICE OF	**.0014265**
INSTITUTE OF MUSEUM	**.0071327**
NATIONAL AERONAUTICS	**.0028531**
NATIONAL ARCHIVES AN	**.0014265**
NATIONAL ENDOWMENT F	**.0014265**
SMALL BUSINESS ADMIN	**.0042796**
SOCIAL SECURITY ADMI	**.0014265**
SURFACE TRANSPORTATI	**.0028531**
Total	**.1108484**

```
66.
67.
  end of do-file

68. do "C:\Users\heonu\AppData\Local\Temp\STD7864_000000.tmp"

69.
70. * Figure A.5
71. graph pie, over(dept21) sort descending legend(rows(3) size(*.7)) plabel(_all percen
  > t, color(white) size(*0.6) format(%2.1f))

72.
73.
  end of do-file

74. do "C:\Users\heonu\AppData\Local\Temp\STD7864_000000.tmp"

75.
76.
77. bysort awarding_agency_name: keep if _n==1
  (672 observations deleted)

78.
79.
80. * Table B.1 - Column 3, 4
81.
82.
83. gen grant_agen_sum=sum(fed_act_agency_mil) // 57264.12

84.
85. gen fed_act_agency_mil_rat=fed_act_agency_mil/57264.12

86.
87. tabstat fed_act_agency_mil, by(awarding_agency_name) stat(mean) // column 3

  Summary for variables: fed_act_agency_mil
       by categories of: awarding_agency_name
```

awarding_agency_name	mean
APPALACHIAN REGIONAL	**108.0585**
CONSUMER PRODUCT SAF	**.234243**
CORPORATION FOR NATI	**131.3495**
DELTA REGIONAL AUTHO	**31.01882**
DENALI COMMISSION (D	**1.392**
DEPARTMENT OF AGRICU	**3287.545**
DEPARTMENT OF COMMER	**2091.971**
DEPARTMENT OF DEFENS	**135.7589**
DEPARTMENT OF EDUCAT	**2874.681**
DEPARTMENT OF ENERGY	**2439.279**
DEPARTMENT OF HEALTH	**6429.189**
DEPARTMENT OF HOMELA	**8630.811**
DEPARTMENT OF HOUSIN	**9453.128**
DEPARTMENT OF JUSTIC	**1305.562**

DEPARTMENT OF LABOR	**167.2109**
DEPARTMENT OF THE IN	**244.6479**
DEPARTMENT OF THE TR	**2.121759**
DEPARTMENT OF TRANSP	**18157.91**
DEPARTMENT OF VETERA	**20.02576**
ELECTION ASSISTANCE	**.025**
ENVIRONMENTAL PROTEC	**1456.345**
EXECUTIVE OFFICE OF	**257.5924**
INSTITUTE OF MUSEUM	**3.056906**
NATIONAL AERONAUTICS	**4.103655**
NATIONAL ARCHIVES AN	**1.222121**
NATIONAL ENDOWMENT F	**20.70227**
SMALL BUSINESS ADMIN	**5.096253**
SOCIAL SECURITY ADMI	**.921455**
SURFACE TRANSPORTATI	**3.156556**
Total	**1974.625**

88.
89. tabstat fed_act_agency_mil_rat, by(awarding_agency_name) stat(mean) // column 4

Summary for variables: fed_act_agency_mil_rat
by categories of: awarding_agency_name

awarding_agency_name	mean
APPALACHIAN REGIONAL	**.001887**
CONSUMER PRODUCT SAF	**4.09e-06**
CORPORATION FOR NATI	**.0022937**
DELTA REGIONAL AUTHO	**.0005417**
DENALI COMMISSION (D	**.0000243**
DEPARTMENT OF AGRICU	**.0574102**
DEPARTMENT OF COMMER	**.036532**
DEPARTMENT OF DEFENS	**.0023708**
DEPARTMENT OF EDUCAT	**.0502004**
DEPARTMENT OF ENERGY	**.042597**
DEPARTMENT OF HEALTH	**.1122726**
DEPARTMENT OF HOMELA	**.1507193**
DEPARTMENT OF HOUSIN	**.1650794**
DEPARTMENT OF JUSTIC	**.0227989**
DEPARTMENT OF LABOR	**.00292**
DEPARTMENT OF THE IN	**.0042723**
DEPARTMENT OF THE TR	**.0000371**
DEPARTMENT OF TRANSP	**.3170905**
DEPARTMENT OF VETERA	**.0003497**
ELECTION ASSISTANCE	**4.37e-07**
ENVIRONMENTAL PROTEC	**.0254321**
EXECUTIVE OFFICE OF	**.0044983**
INSTITUTE OF MUSEUM	**.0000534**
NATIONAL AERONAUTICS	**.0000717**
NATIONAL ARCHIVES AN	**.0000213**
NATIONAL ENDOWMENT F	**.0003615**
SMALL BUSINESS ADMIN	**.000089**
SOCIAL SECURITY ADMI	**.0000161**
SURFACE TRANSPORTATI	**.0000551**
Total	**.0344828**

90.
91.
92.
93.
94.
95. log close
name: **<unnamed>**
log: **F:\fiscal research\mayor\PSRM data\PSRM_descstat1_log.smcl**
log type: **smcl**
closed on: **19 Dec 2023, 11:18:06**