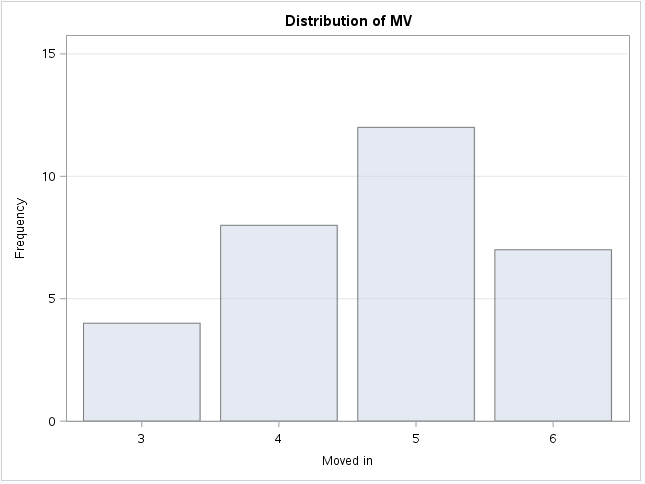
Cluster formation

|  |
| --- |
| **/\*20 Cluster run of FASTCLUS\*/**  **libname census "/folders/myfolders/census";**  **proc fastclus data=census.psam\_h17\_subset1**  **radius=0 replace=full**  **converge=0 maxiter=200**  **maxclusters=20**  **OUTSTAT=census.psam\_h17\_subset1\_20clusters\_stat**  **OUT=census.psam\_h17\_subset1\_20clusters**  **distance;**  **id SERIALNO;**  **var VALP HINCP;**  **run;**  **proc sgplot;**  **scatter y=HINCP x=VALP / group=cluster;**  **title ’ACS PUMS 2013 1 YR 20-Cluster Analysis’;**  **title2 ’of Data Containing Property Value and Household Income’;**  **run;** |

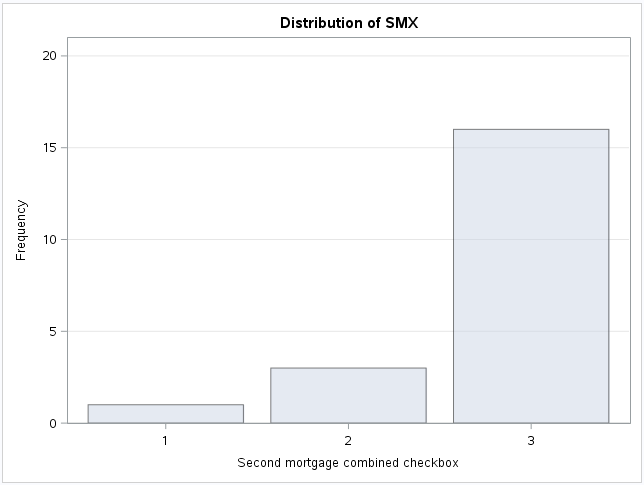
Created tables for each cluster

|  |  |
| --- | --- |
| **%macro sqlloop;**  **proc sql;**  **/\*Loop through 20 times to create a table for each cluster\*/**  **%DO k=1 %TO 20;**  **create table census.psam\_h17\_subset1\_cluster\_agg&k. as**  **select \***  **from census.psam\_h17\_subset1\_20clusters\_agg**  **where CLUSTER=&k.;**  **%END;**  **QUIT;**  **%mend;**  **%sqlloop;**  **For all vaiabls**   |  | | --- | | **/\*Join additional variables from psam\_h17 table for profiling\*/**  **proc sql;**  **title '20 Cluster aggregated information for profiling';**  **create table census.psam\_h17\_subset1\_20clusters\_agg as**  **select a.SERIALNO, a.CLUSTER, a.DISTANCE, a.HINCP, a.VALP, a.TAXP,**  **b.MV, b.SMX, b.WORKSTAT, b.WIF**  **from census.psam\_h17\_subset1\_20clusters as a left join census.psam\_h17 as b**  **on a.SERIALNO=b.SERIALNO;**  **run;** |   Cluster 20 -  TAX distribution |



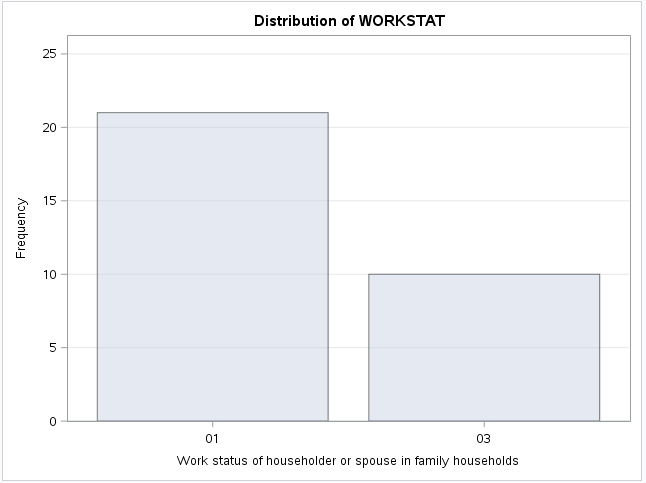
5 - 10 to 19 years

aaround 39% of total



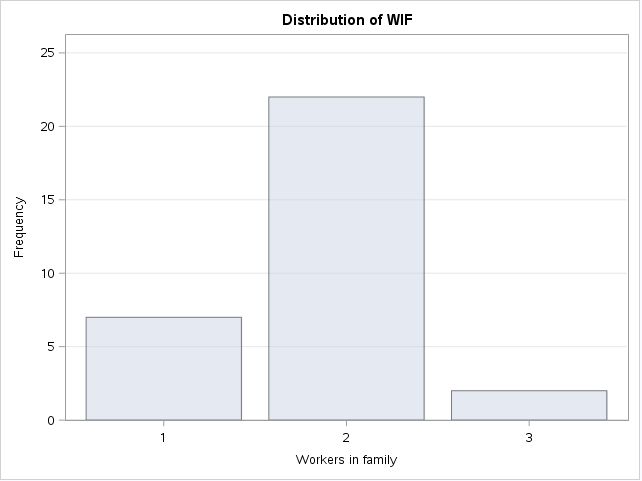
3 - No second mortgage

80% of total



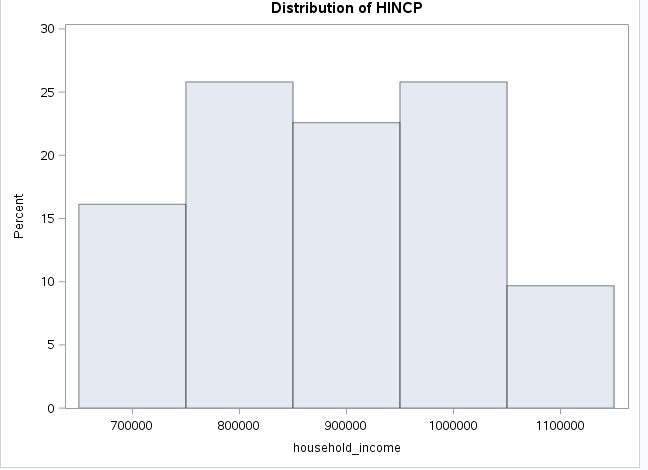
1- both employed

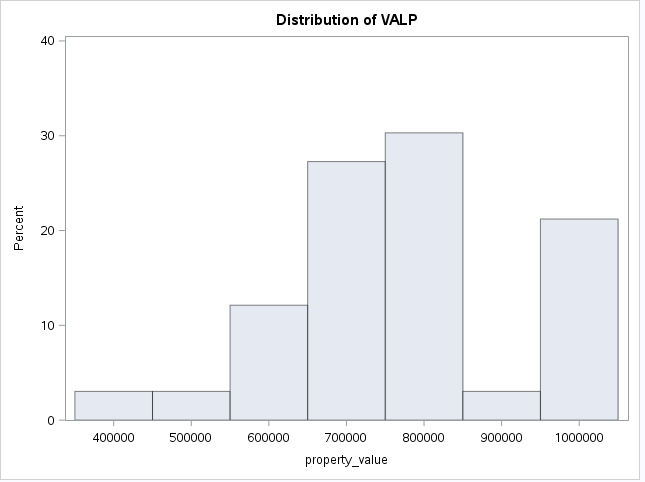
68%



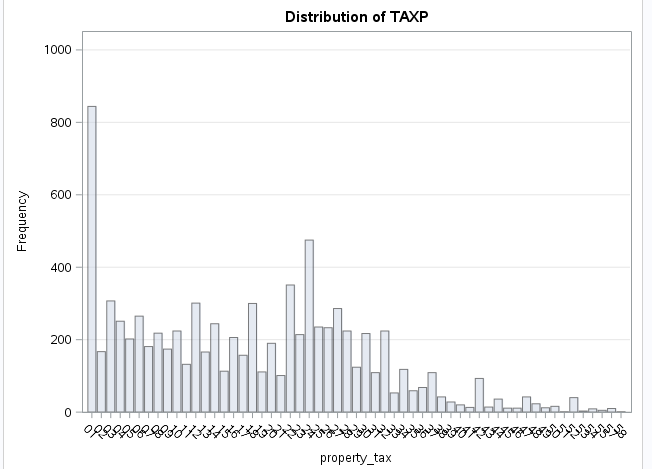
2- workers in family

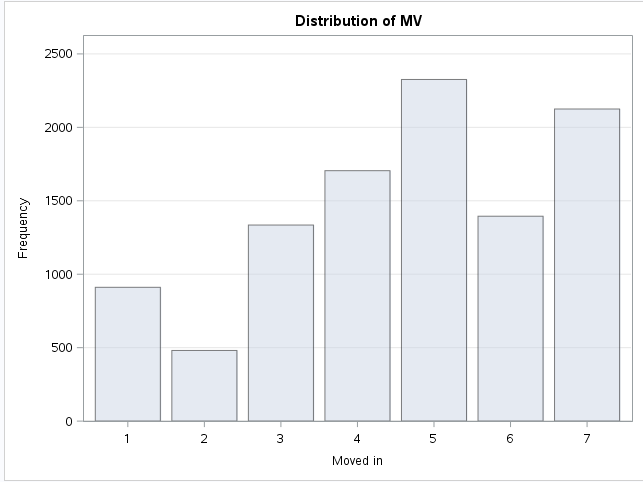
71%

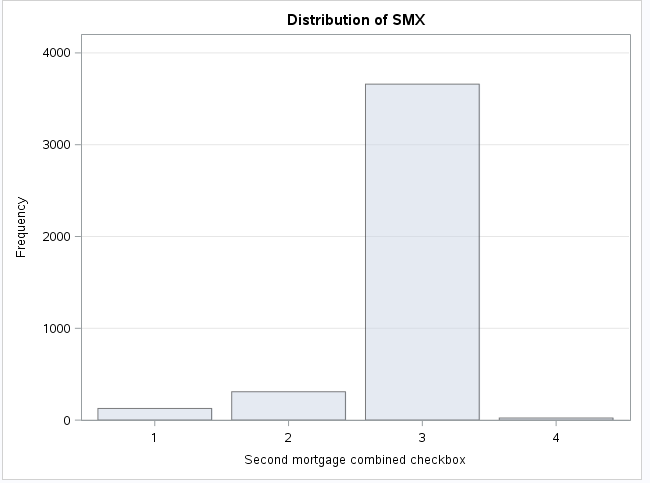


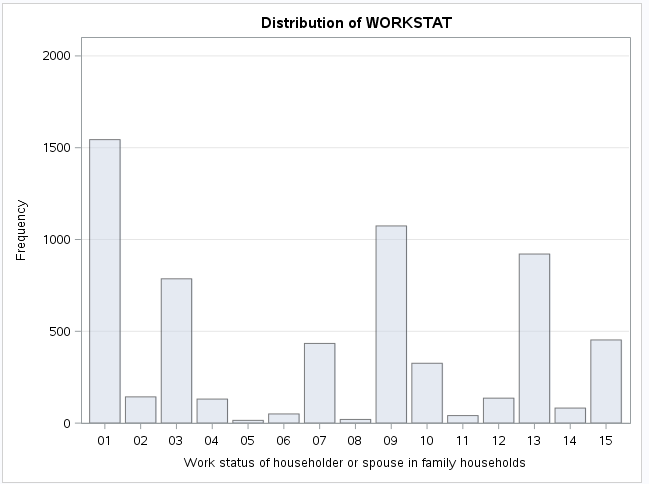


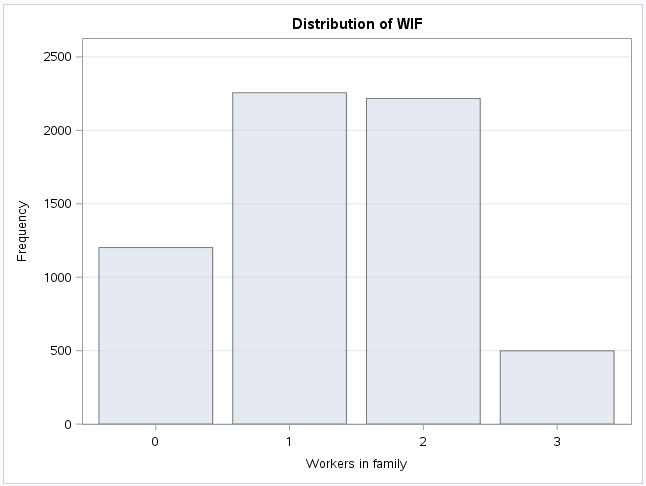
Cluster 1

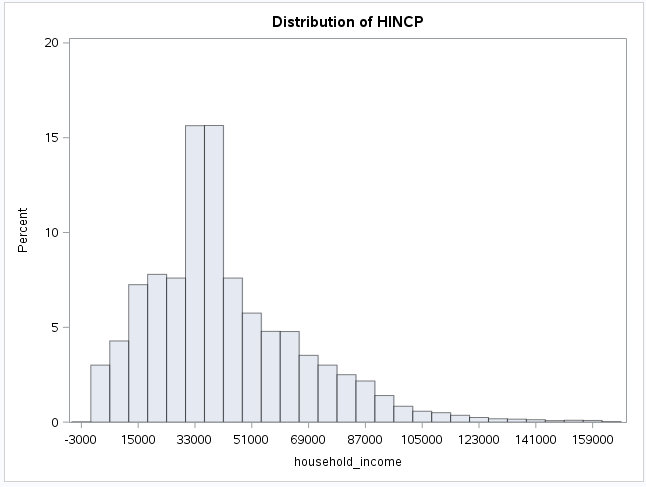


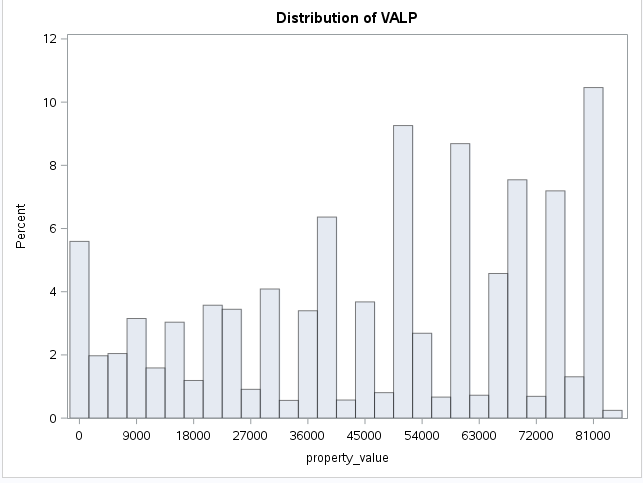




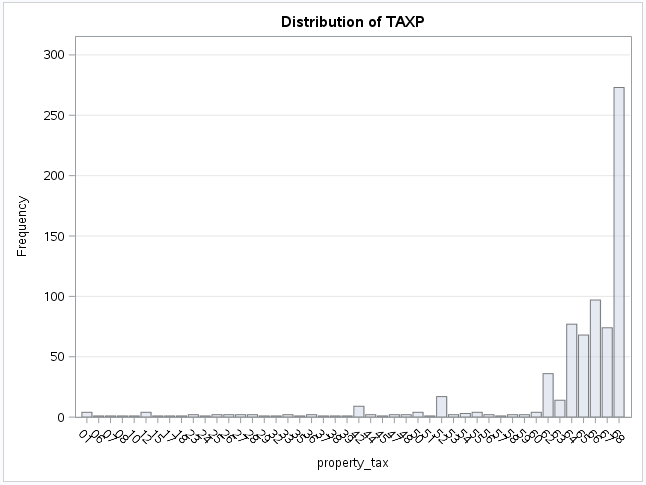


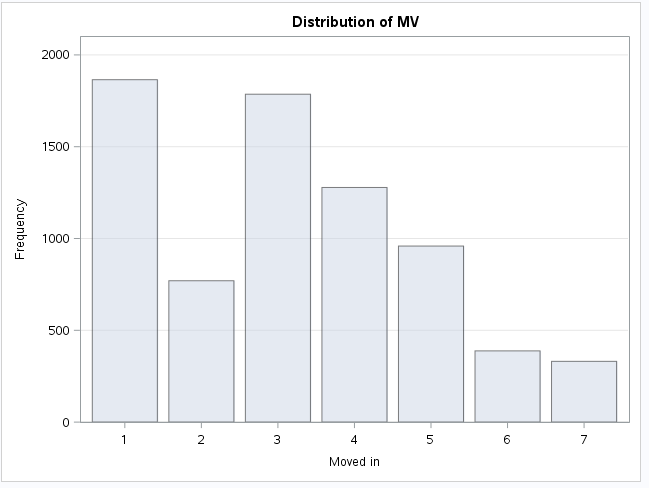


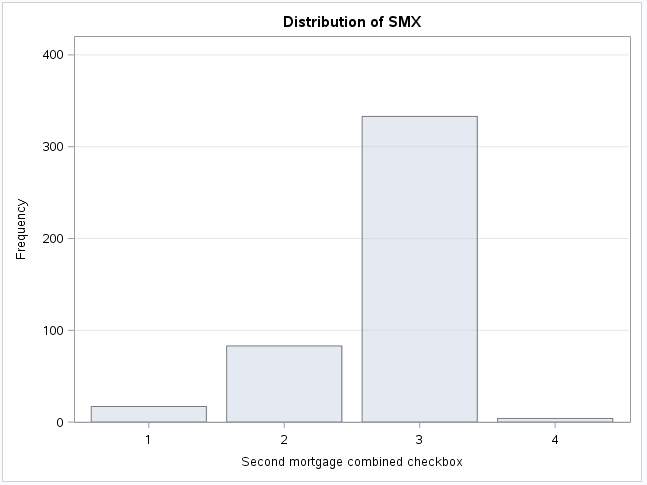


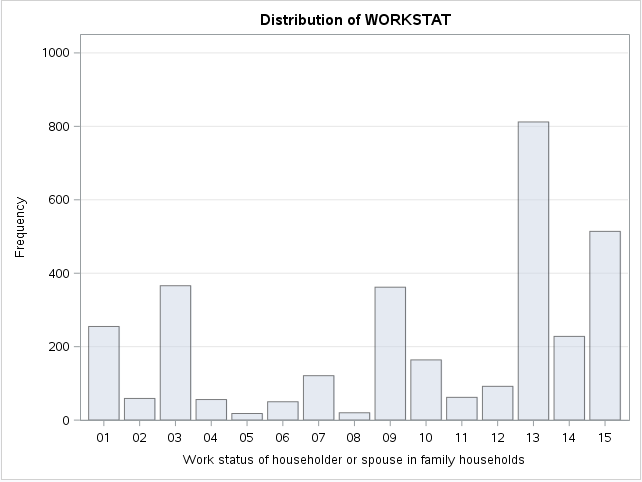


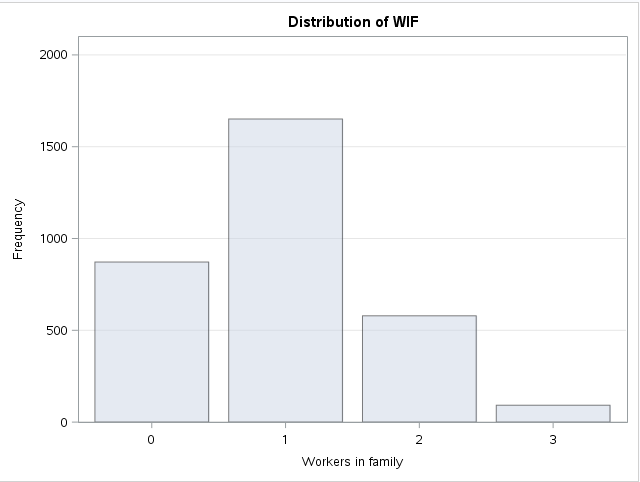
Cluster 2

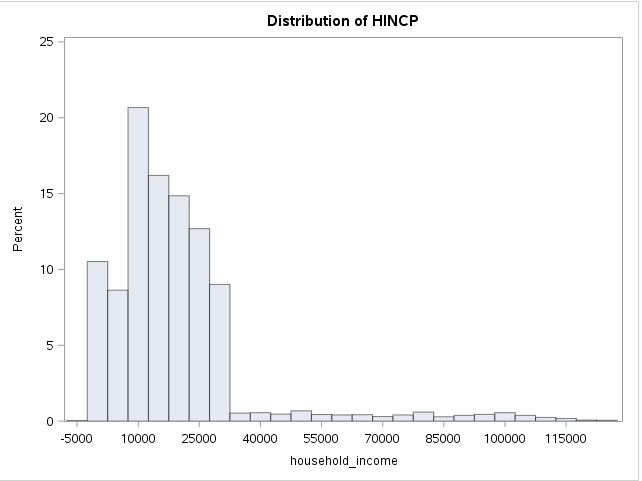


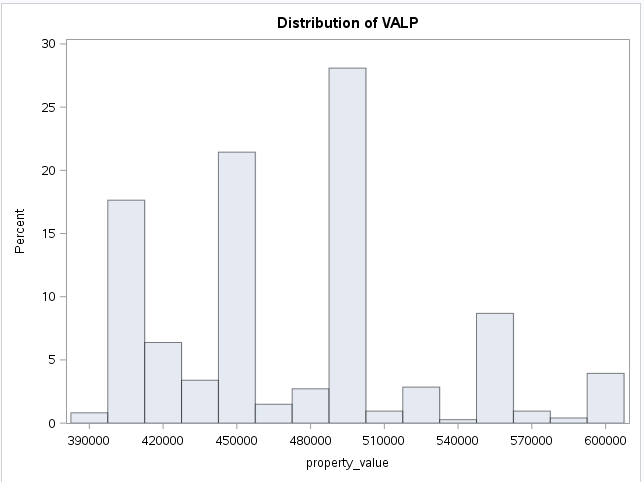




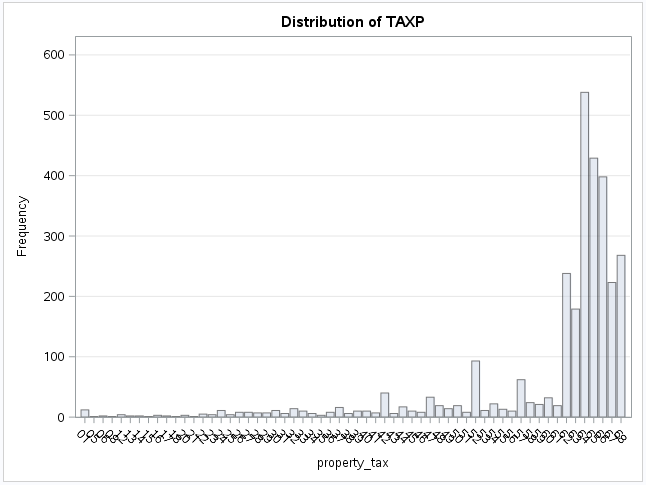


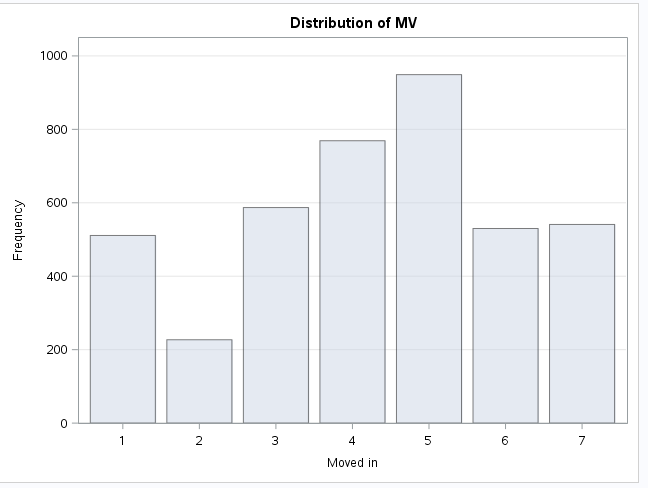


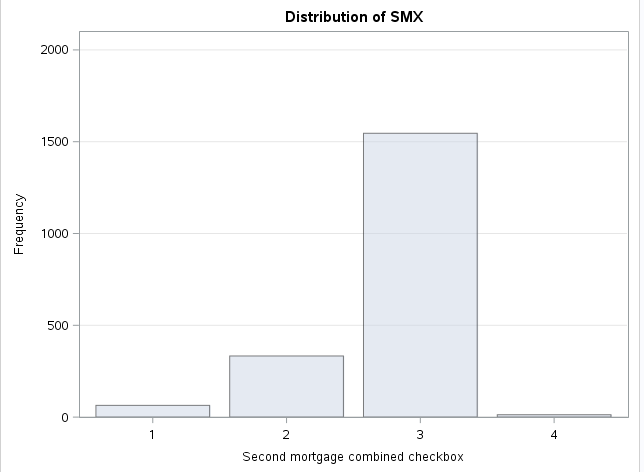


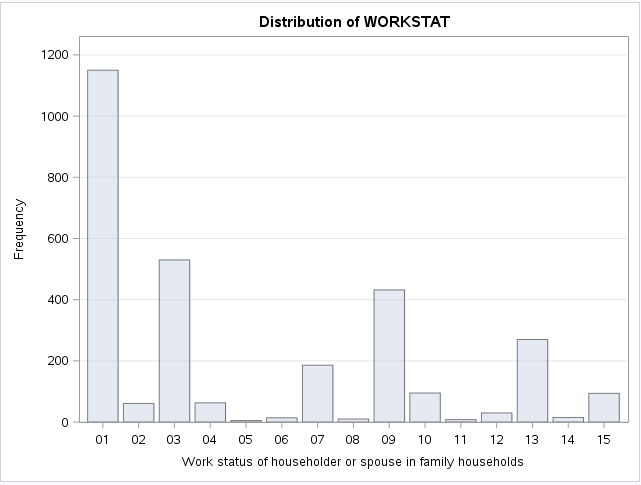


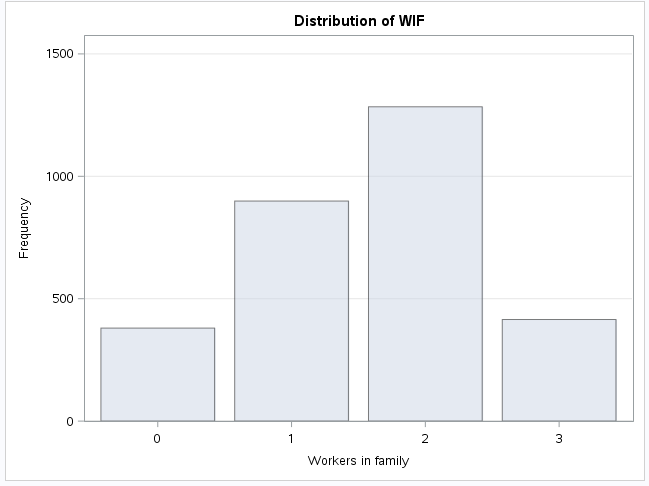
Cluster 3

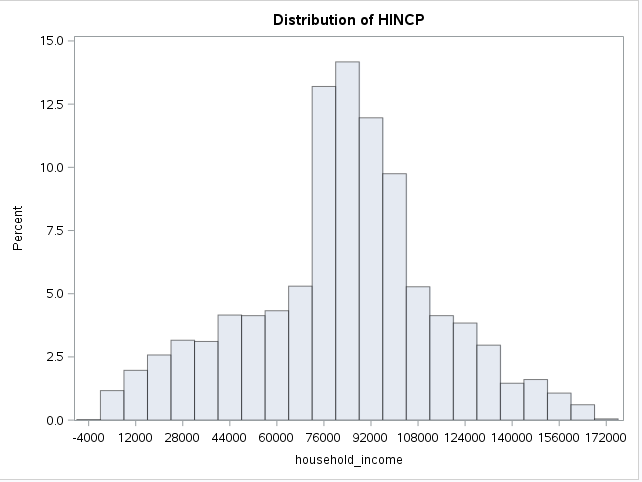


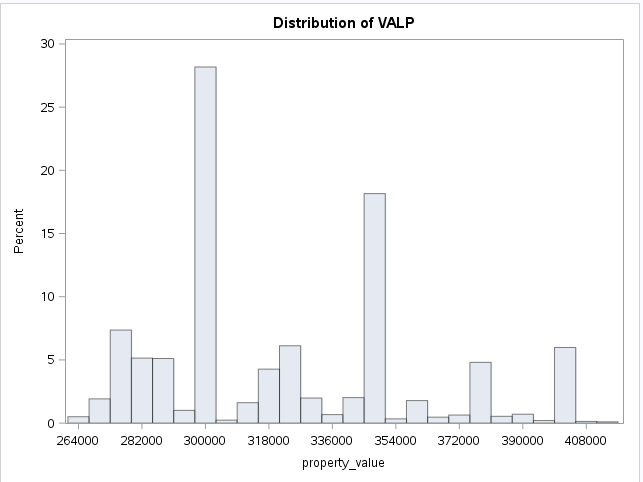




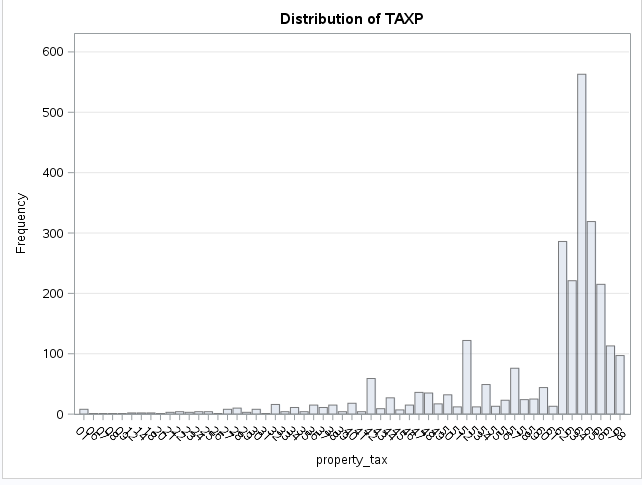


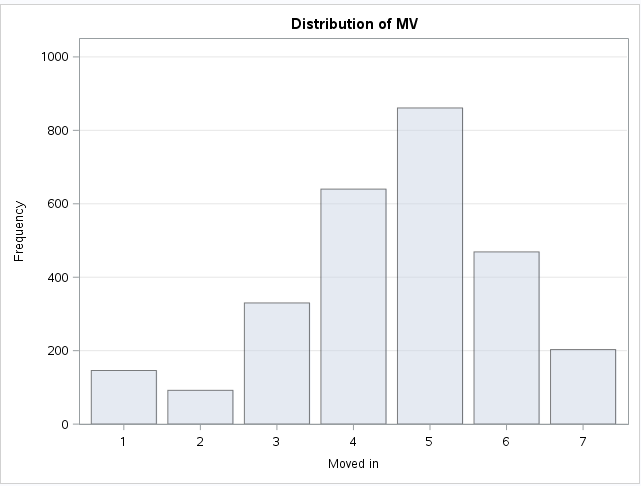


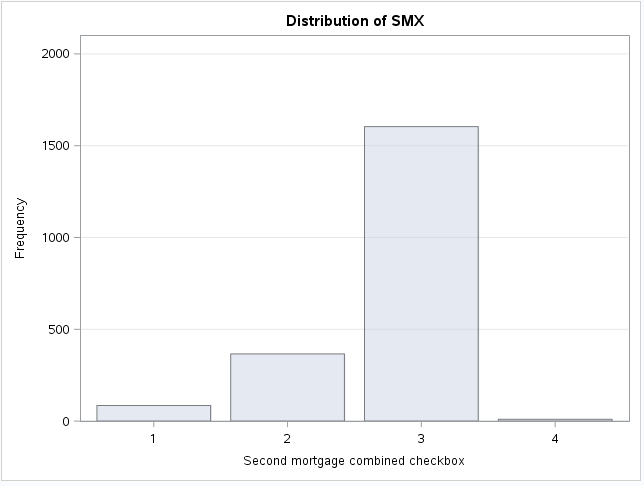


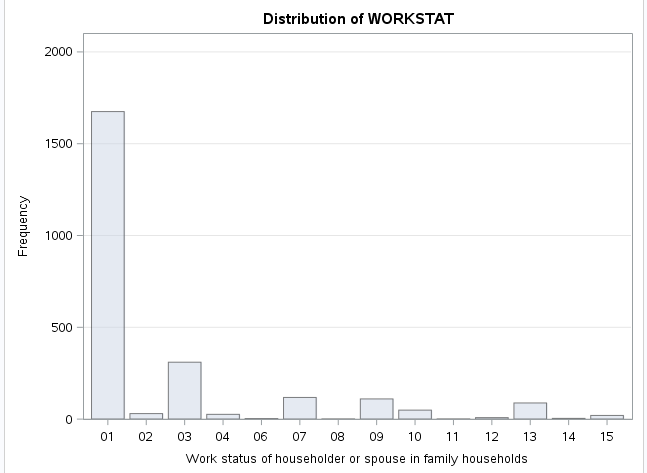


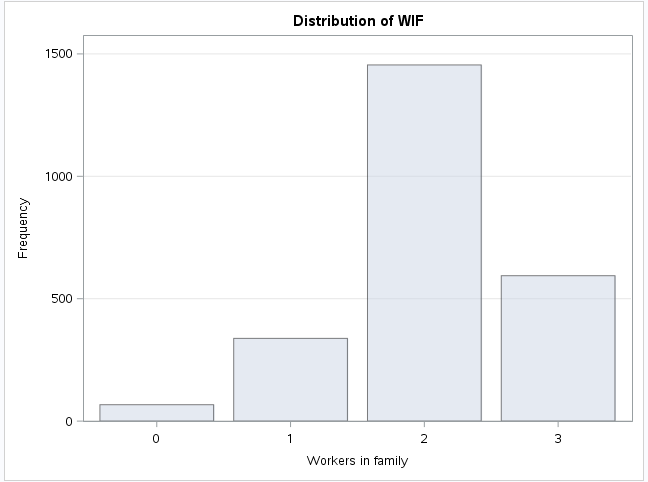
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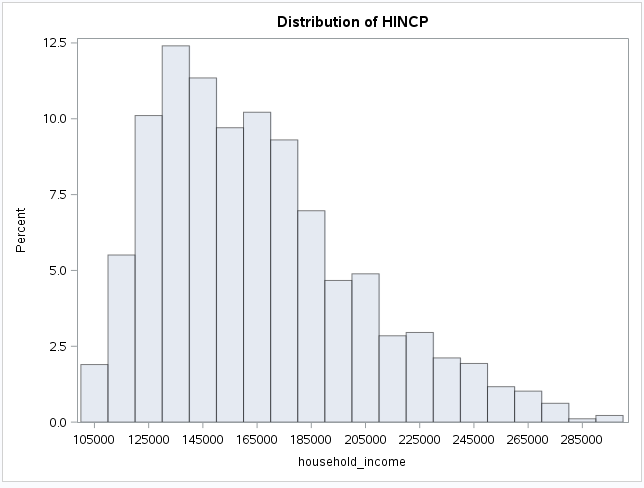


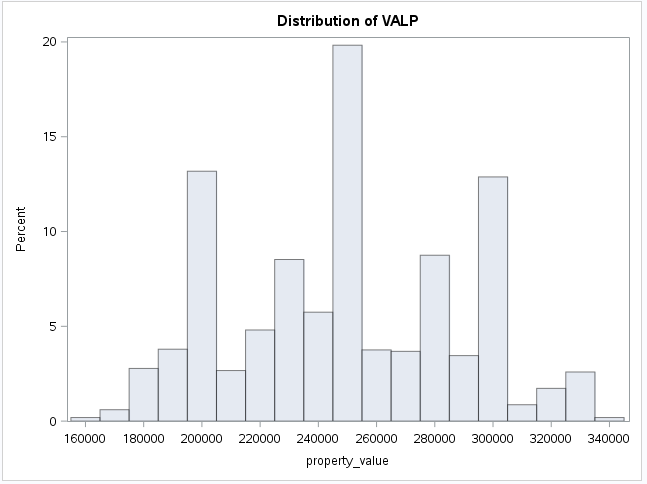




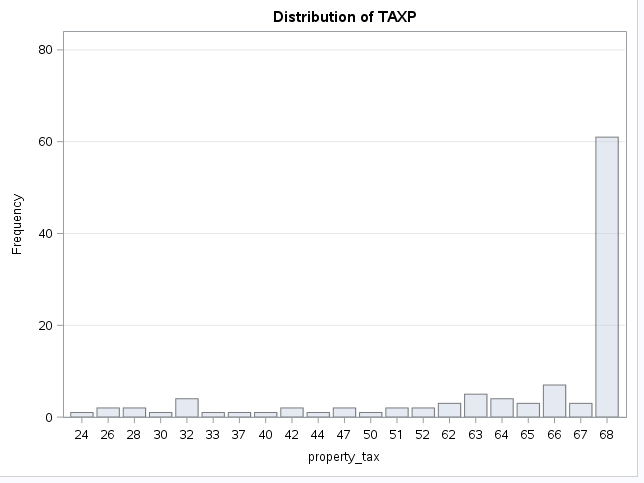


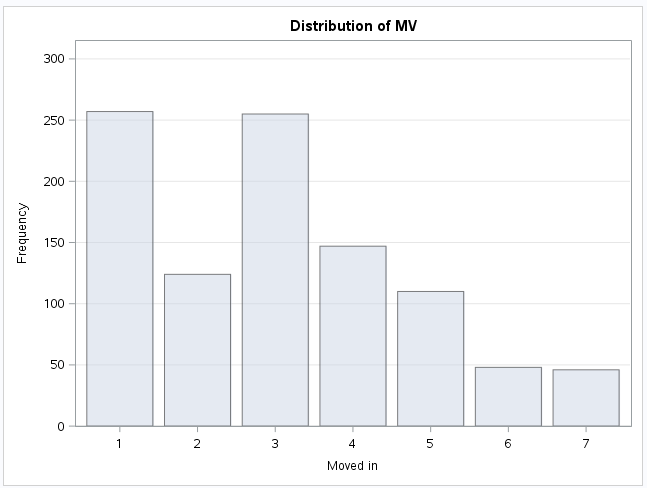


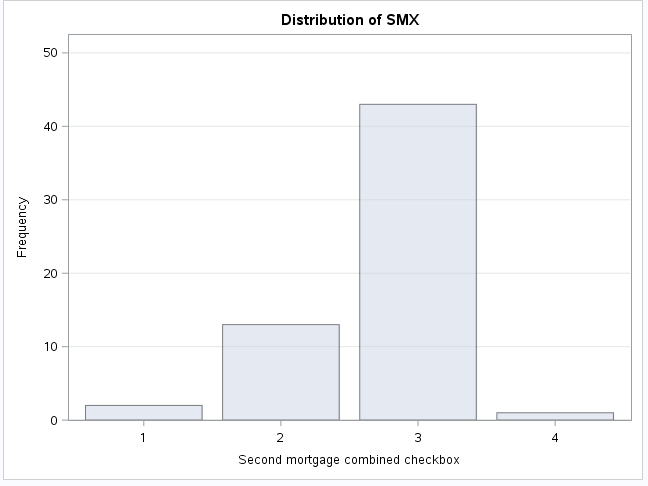


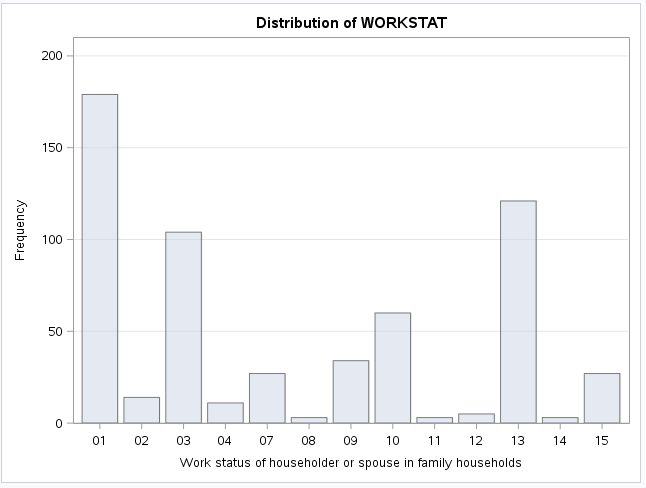


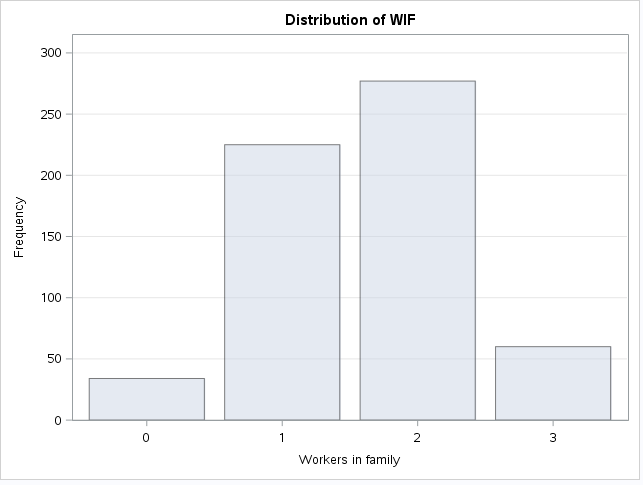
Cluster 5

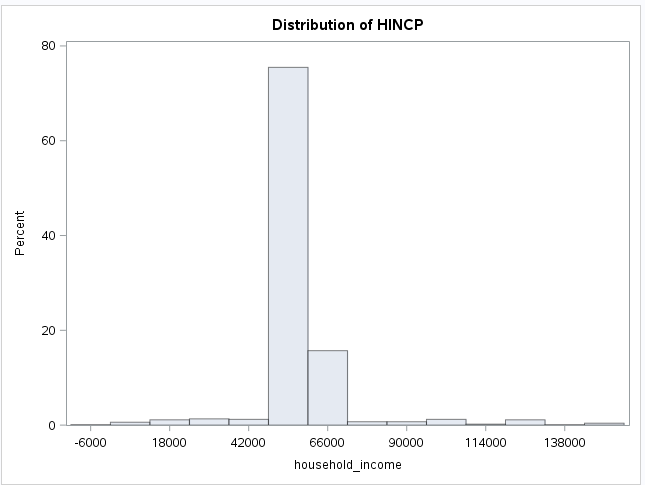


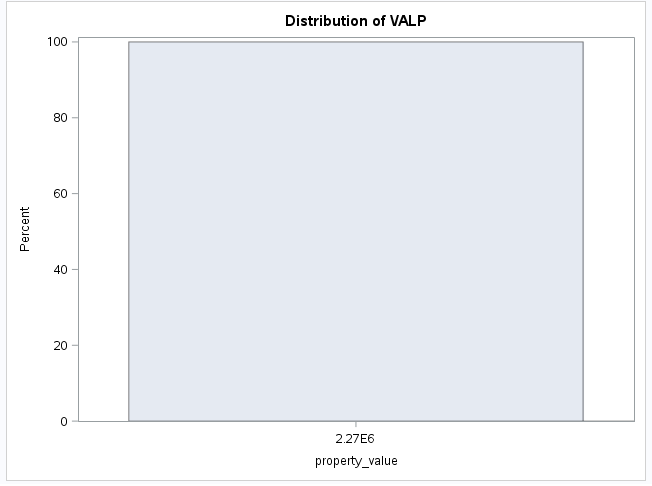




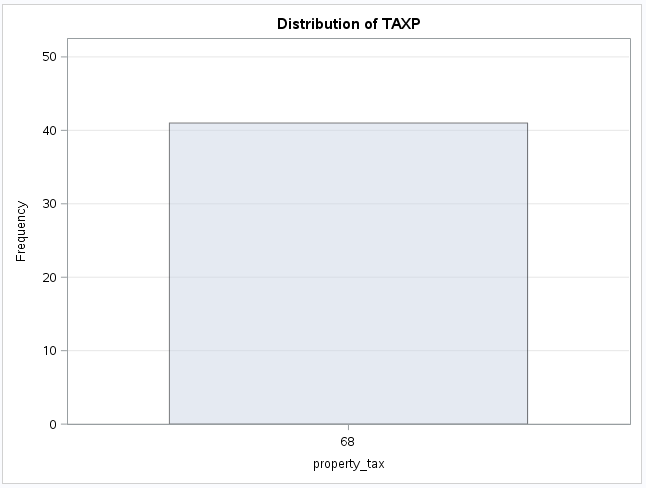


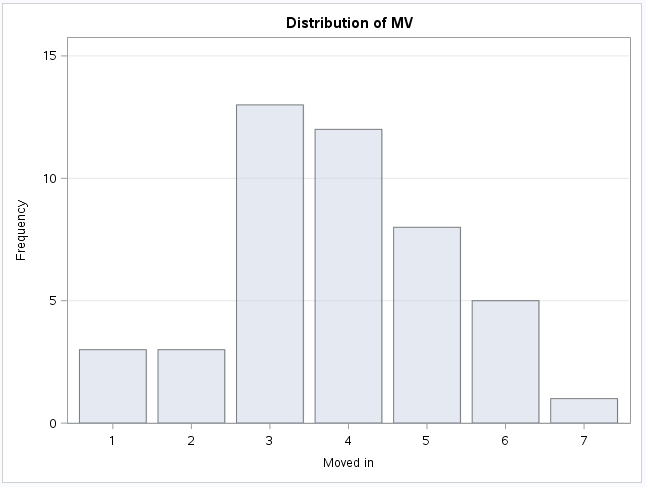


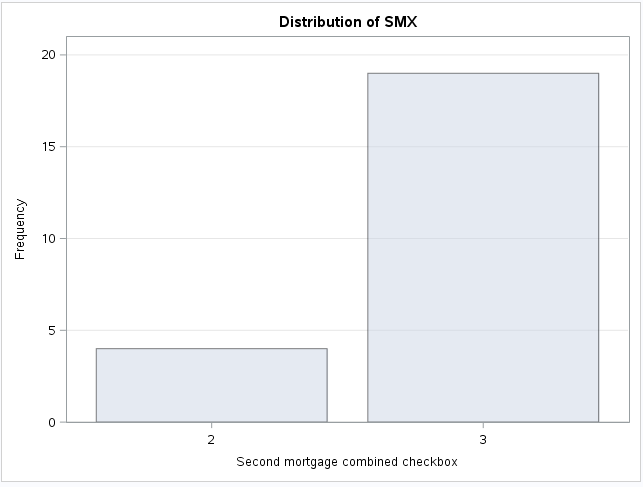


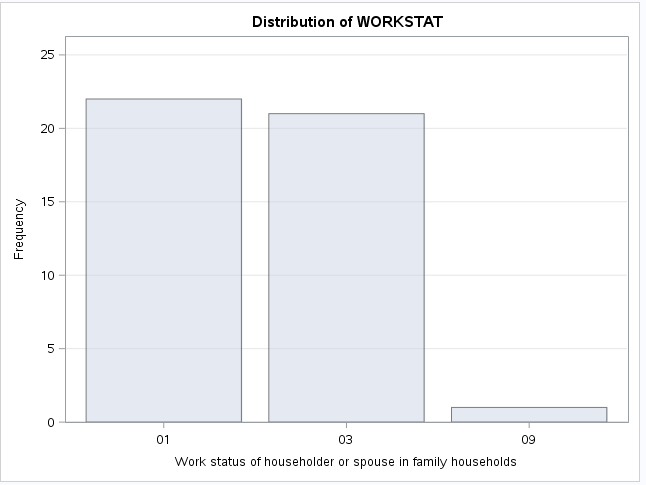


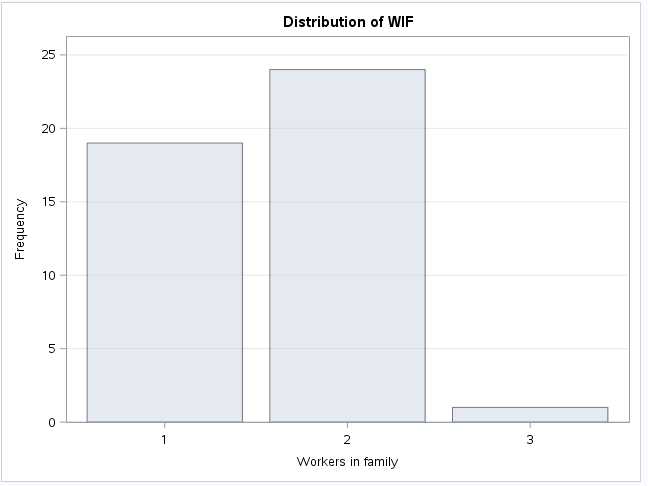
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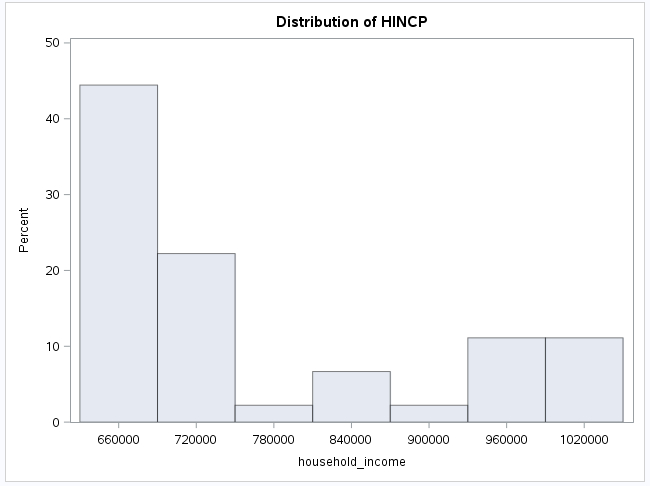


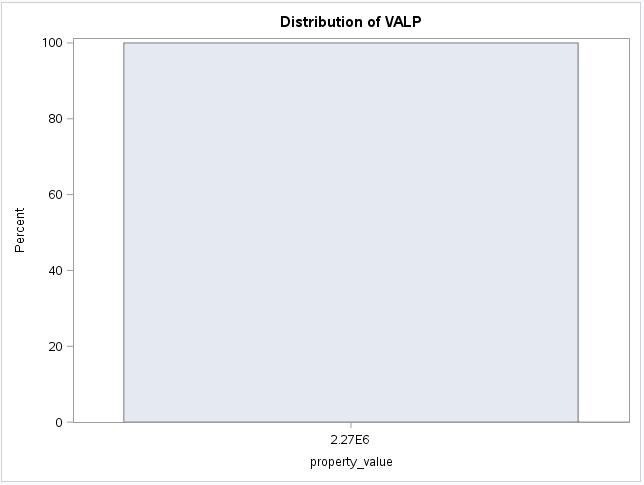




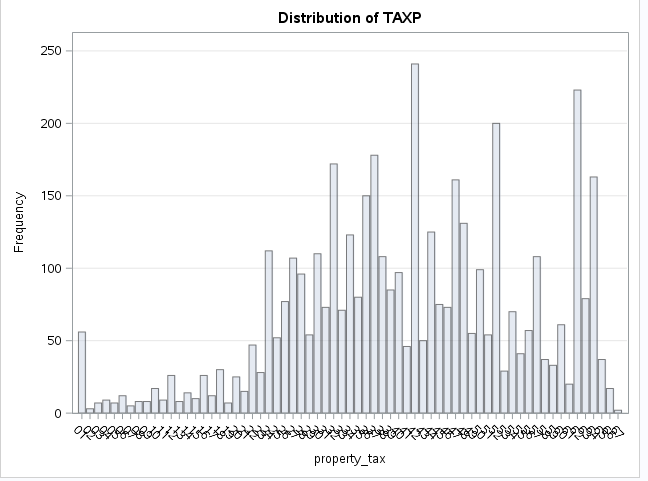


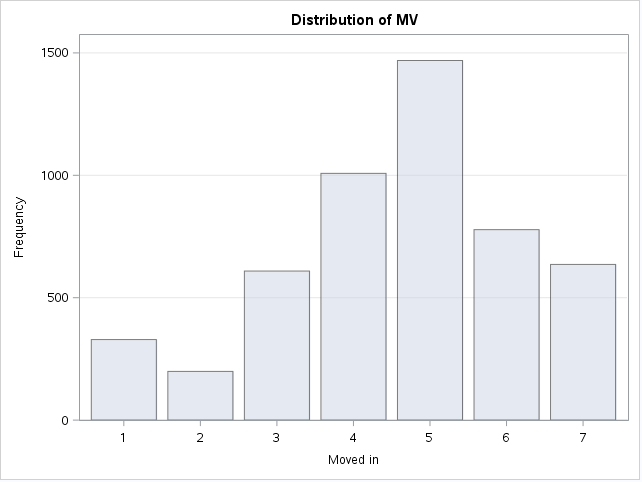


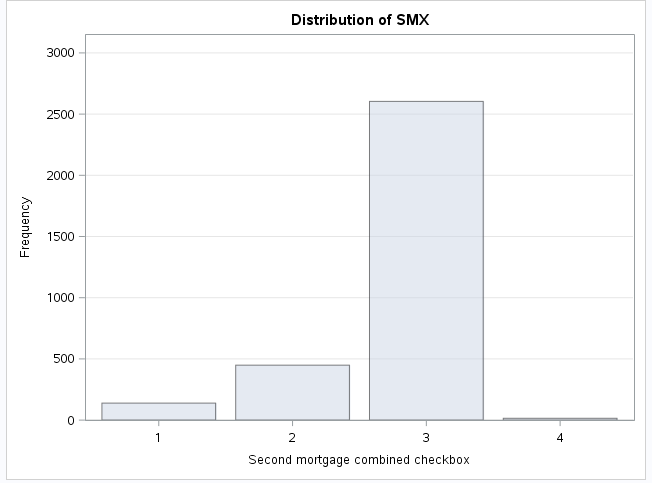


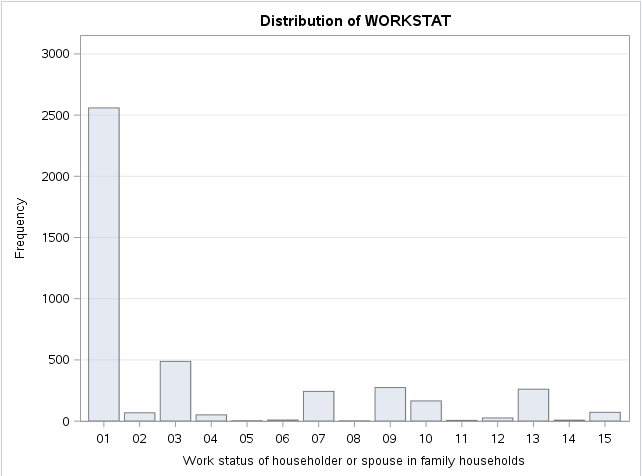


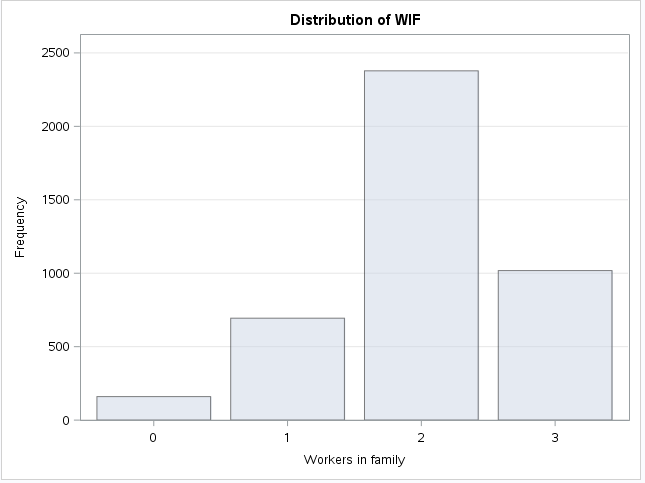
Cluster 7

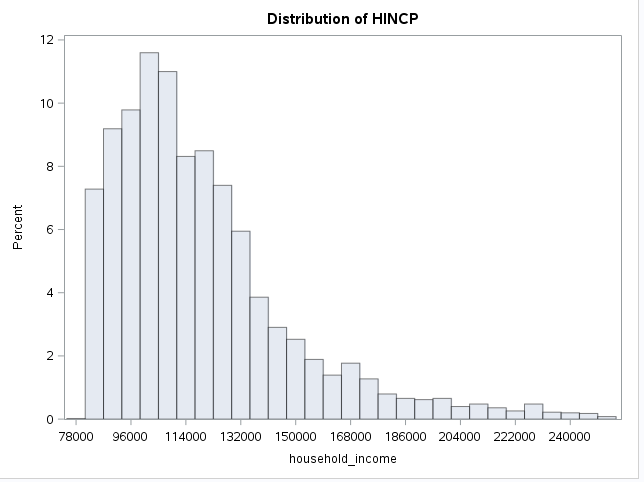


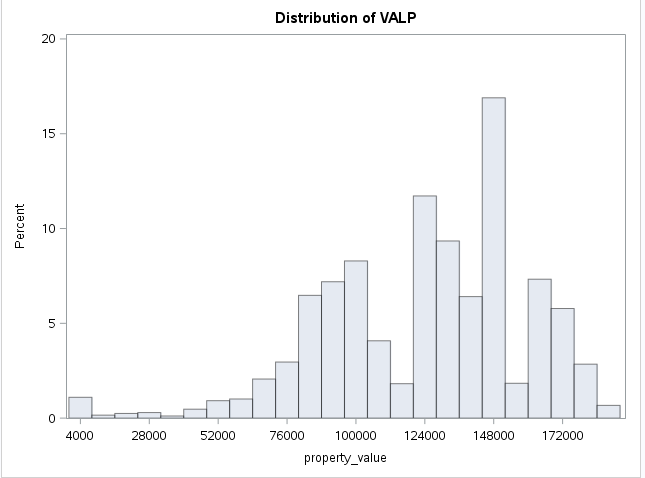




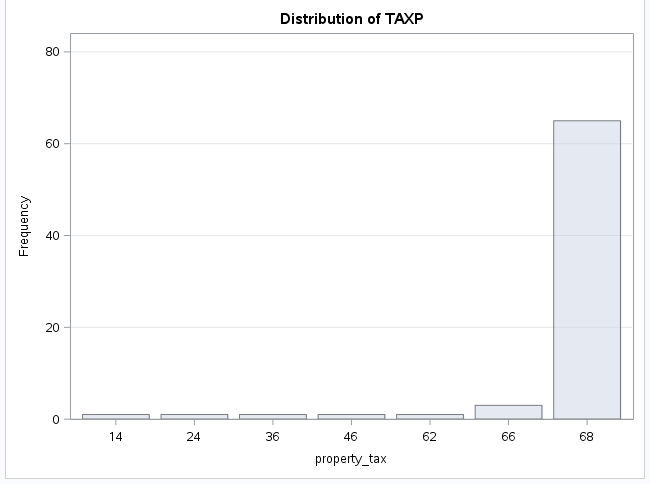


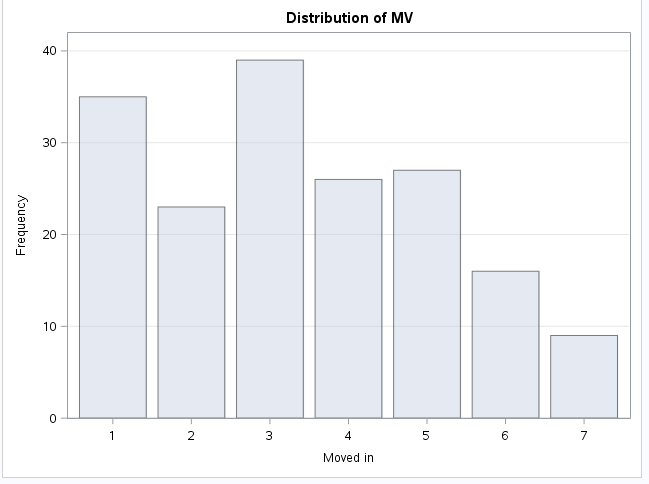


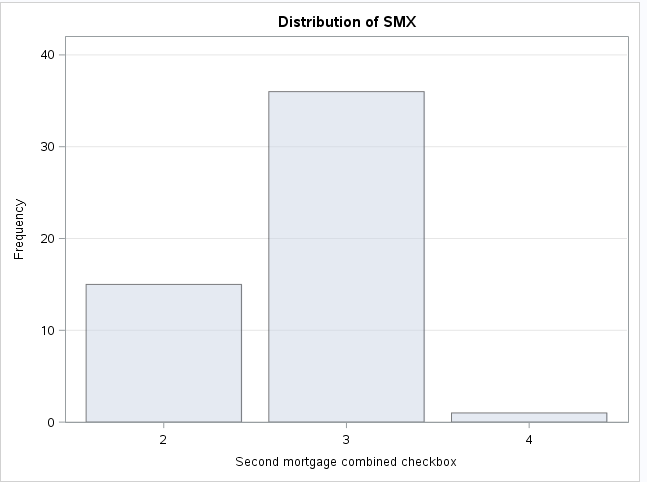


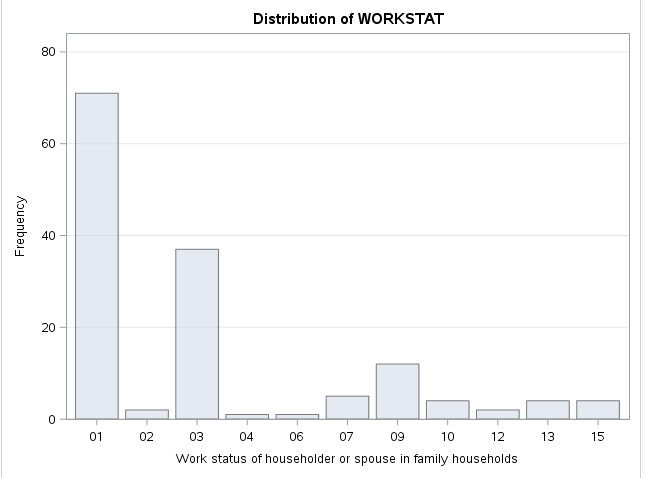


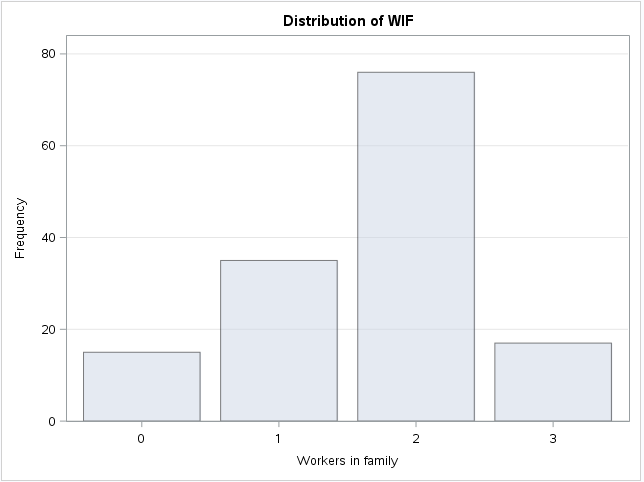
Cluster 8

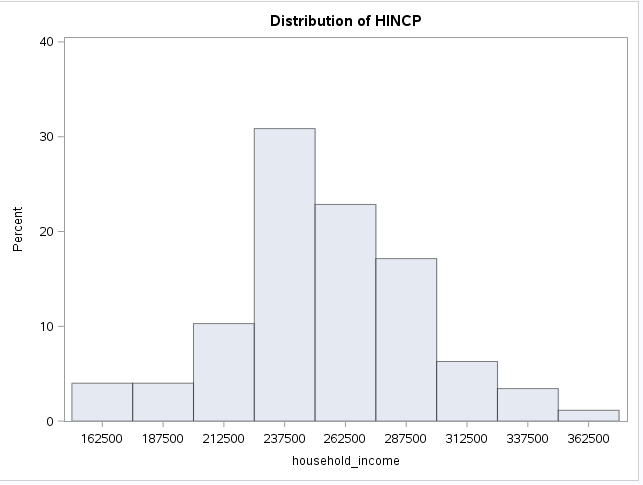


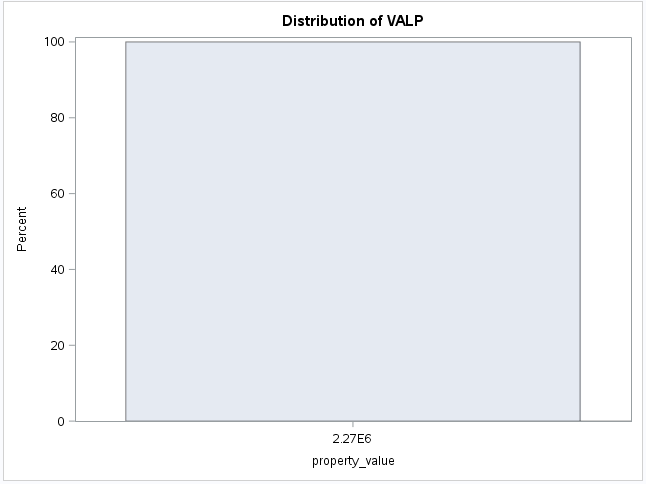




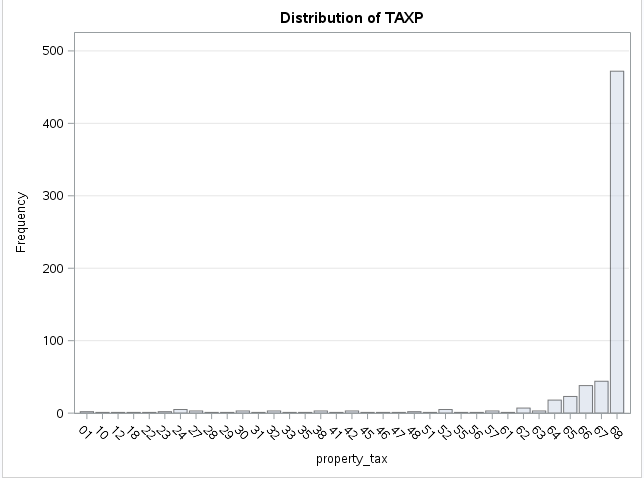


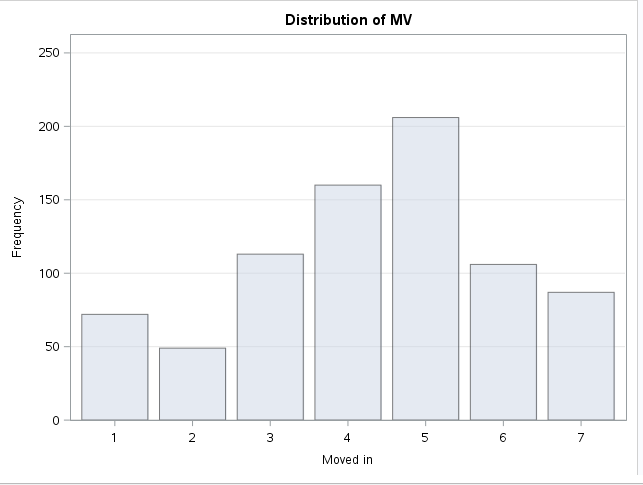


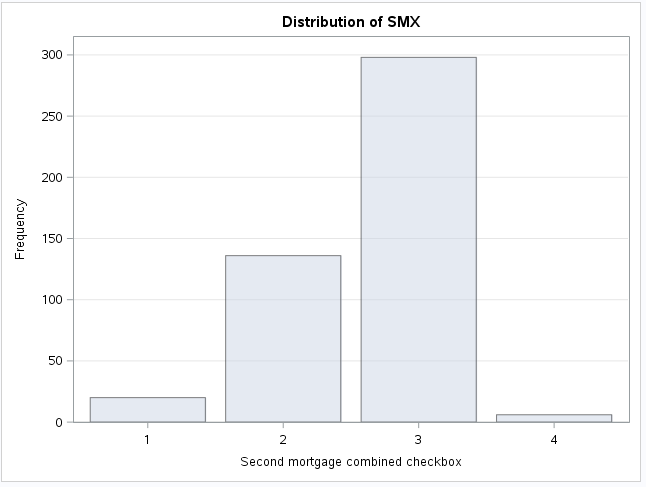


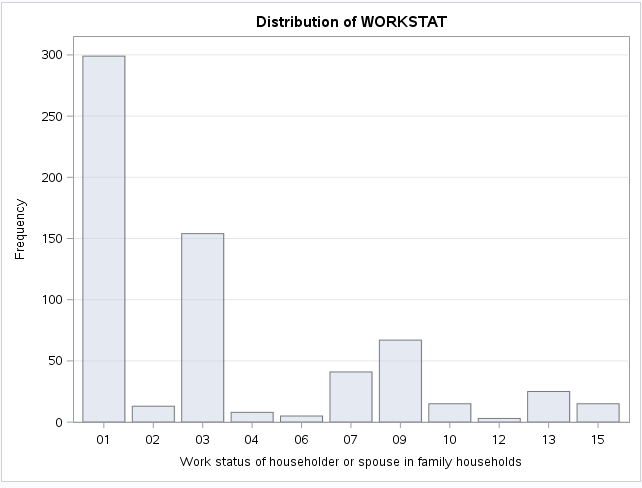


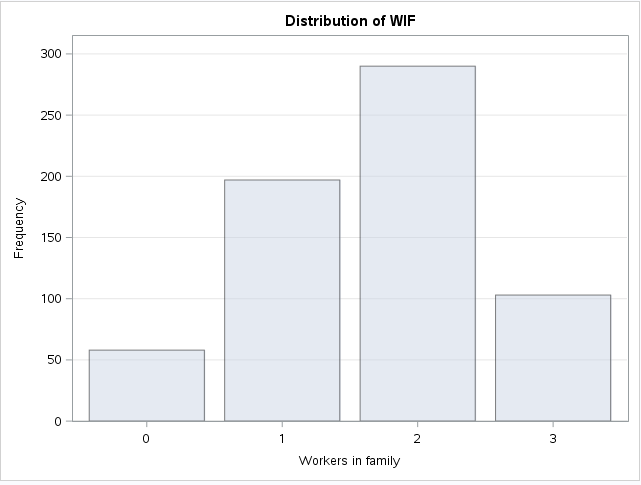
Cluster 9

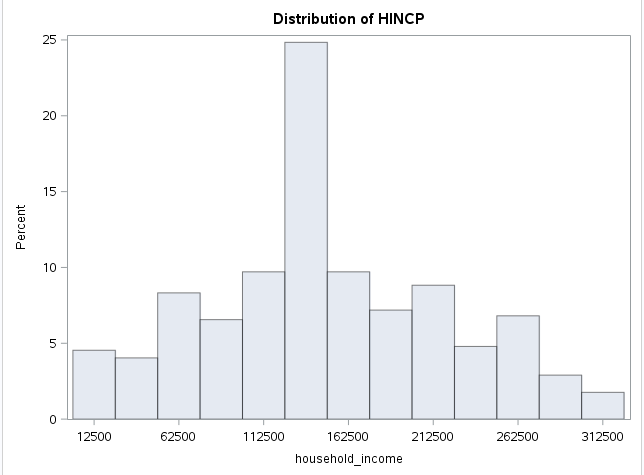


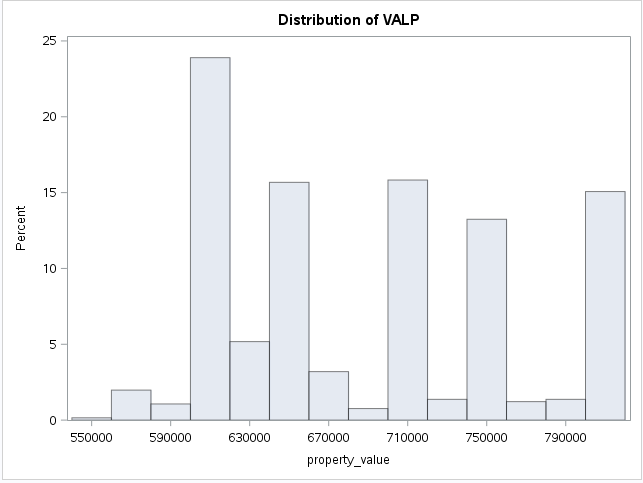




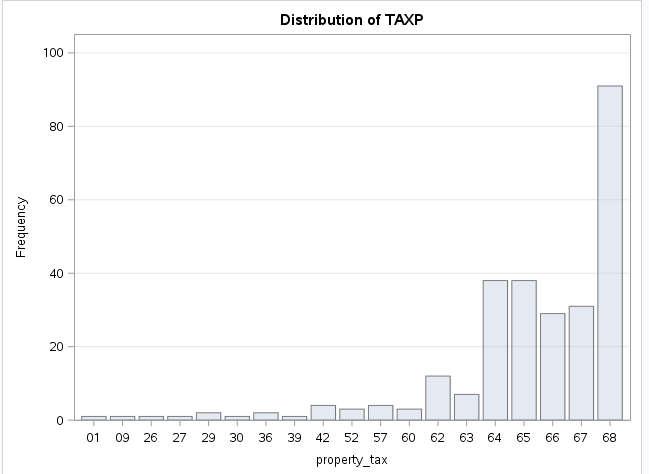


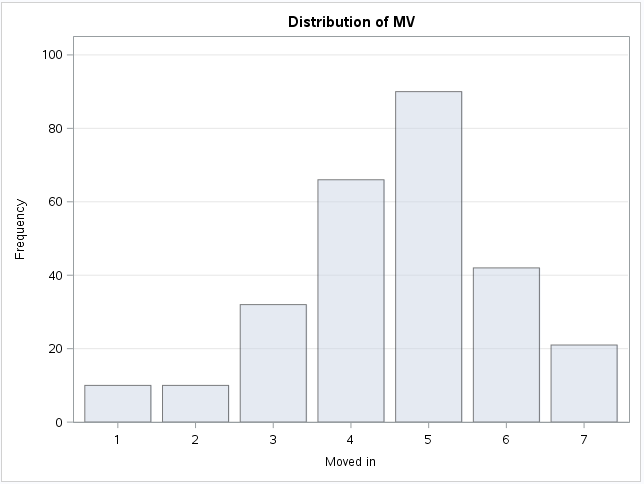


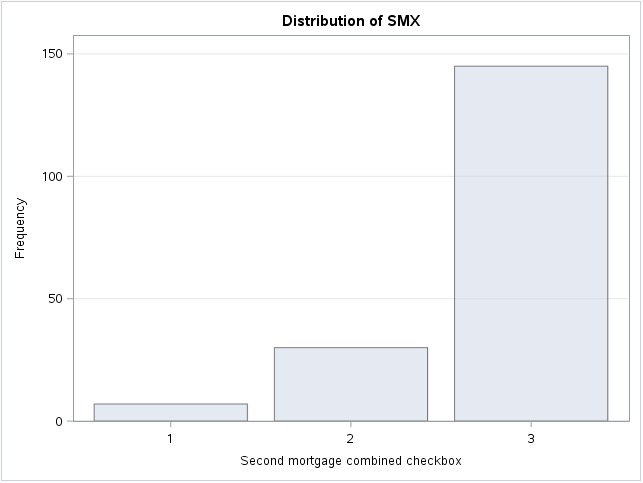


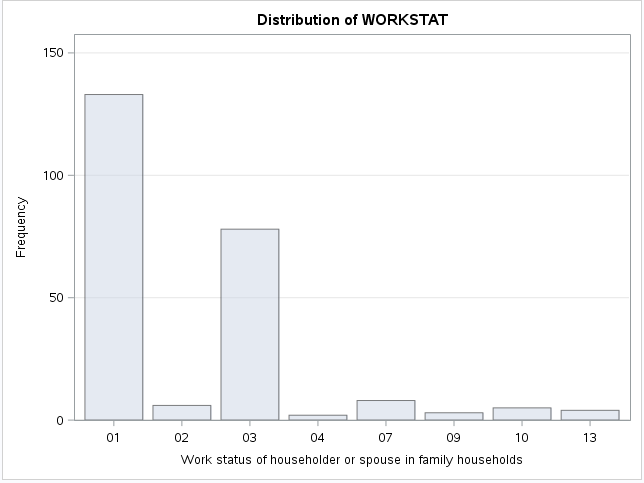


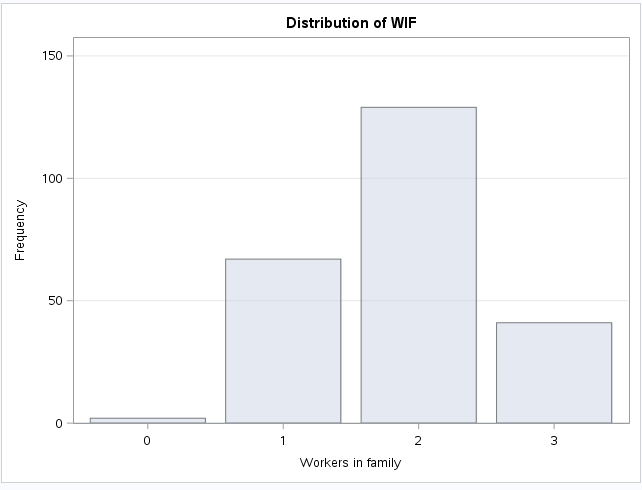
Cluster 10

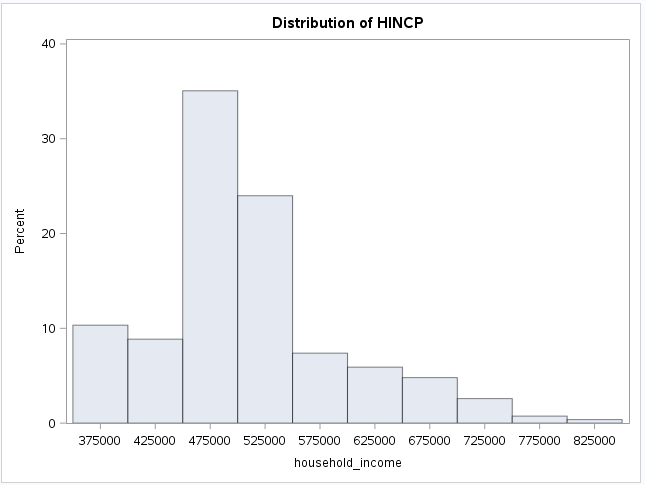


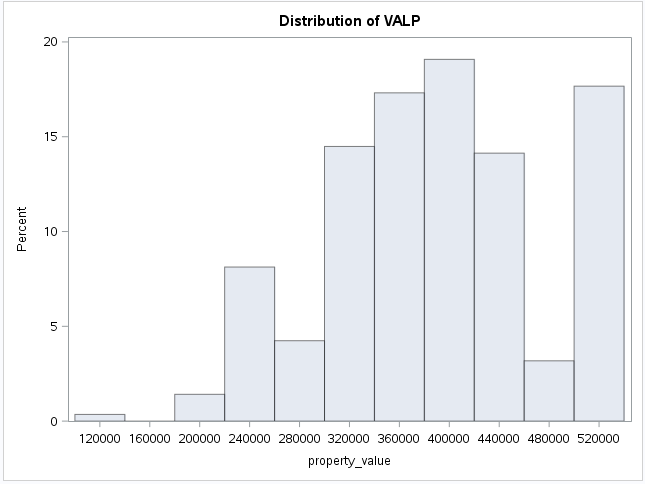




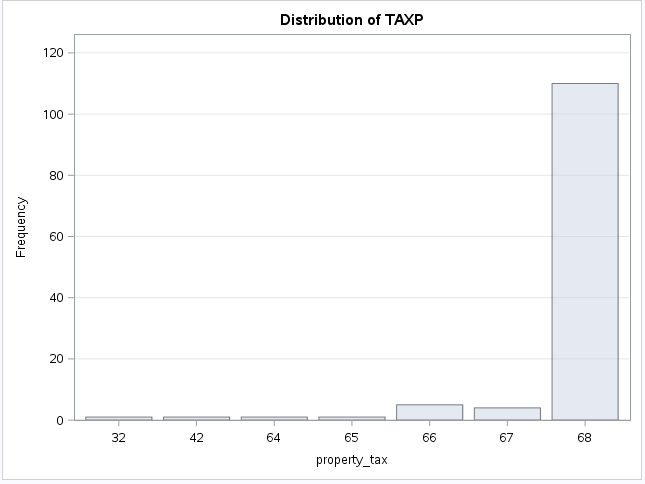


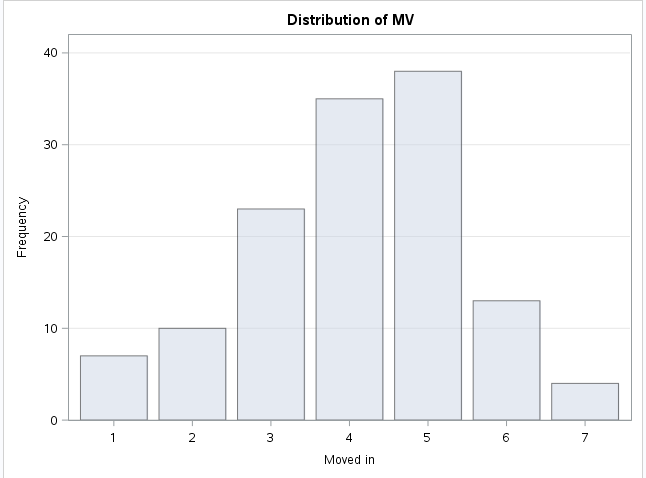


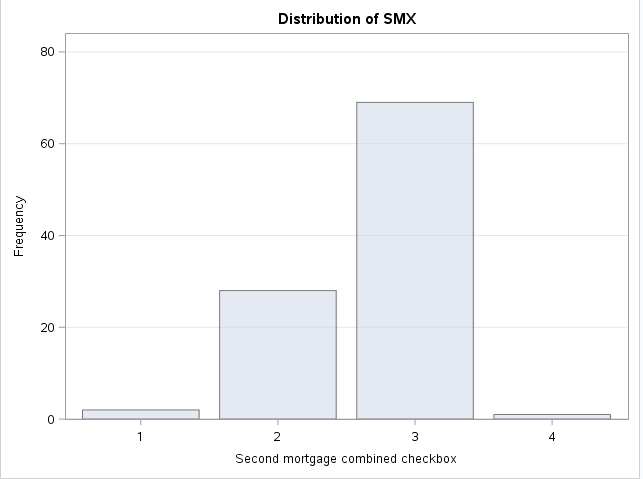


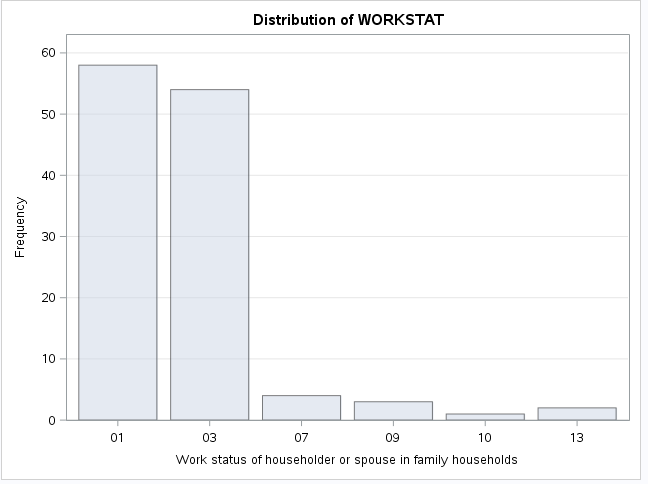


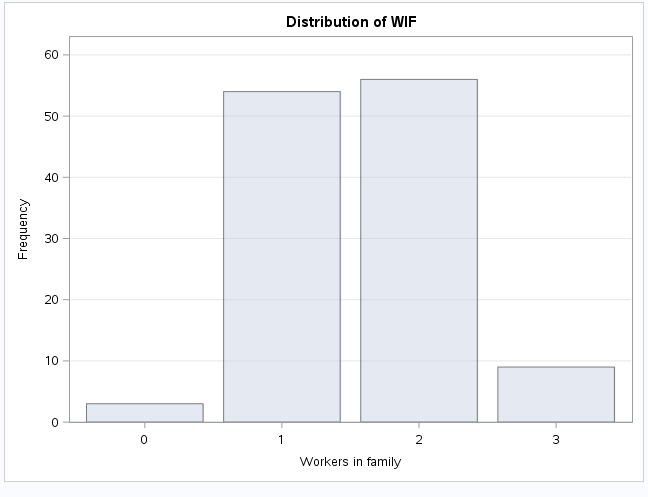
Cluster 11

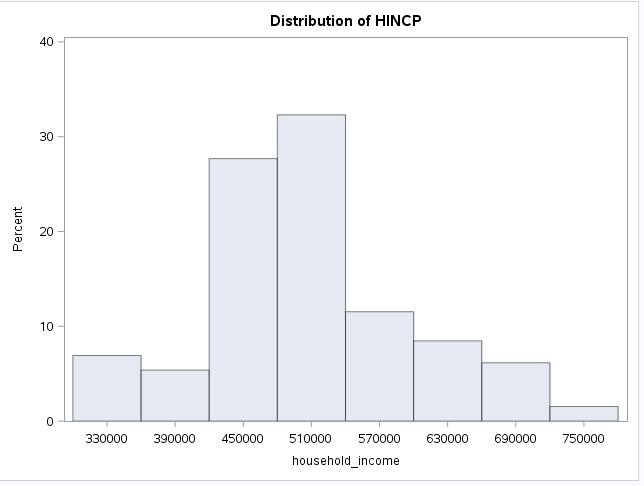


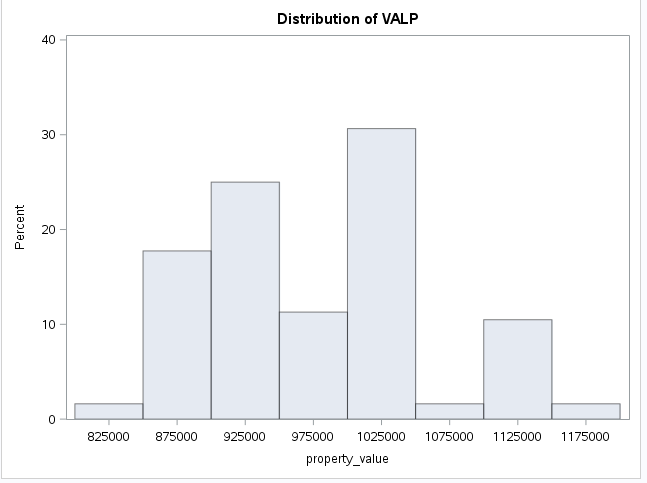




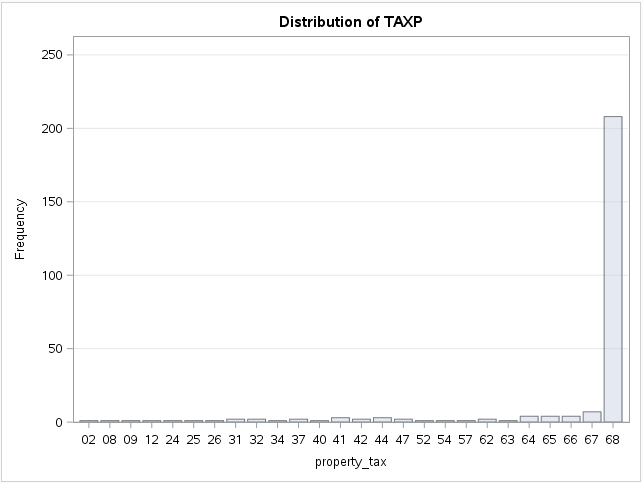


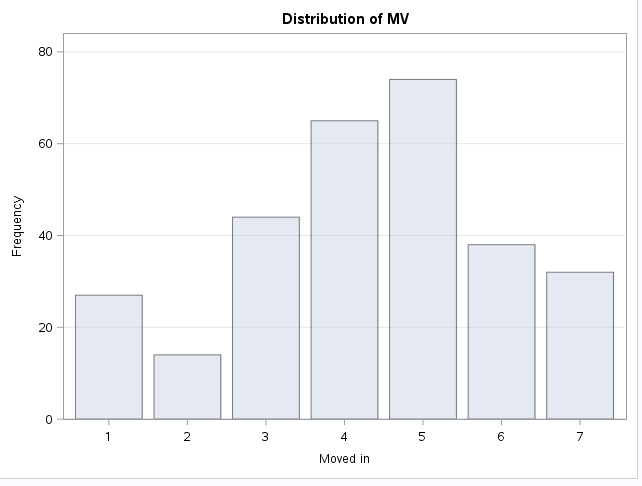


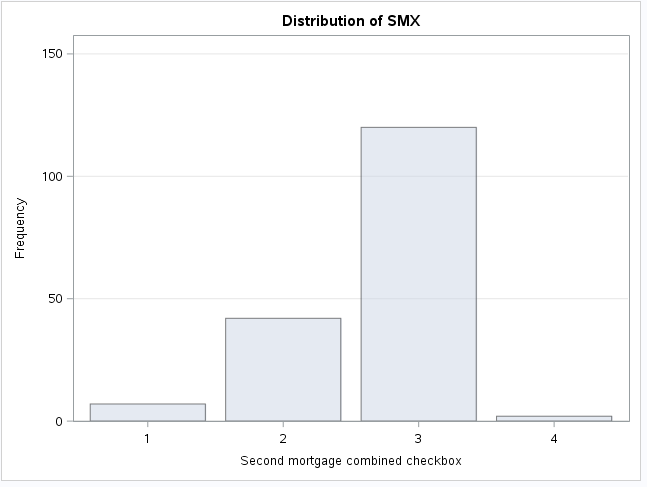


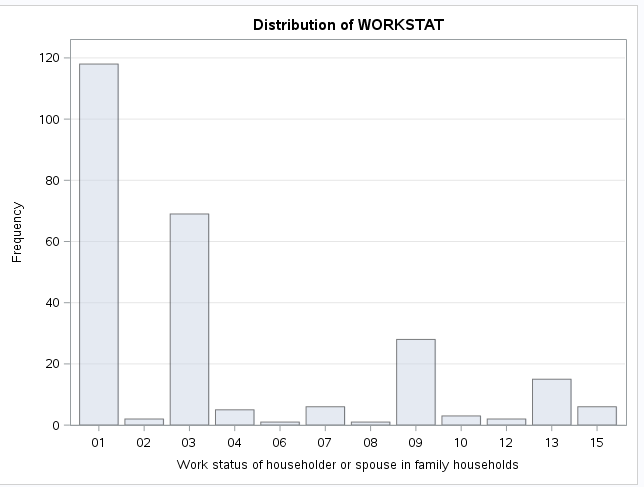


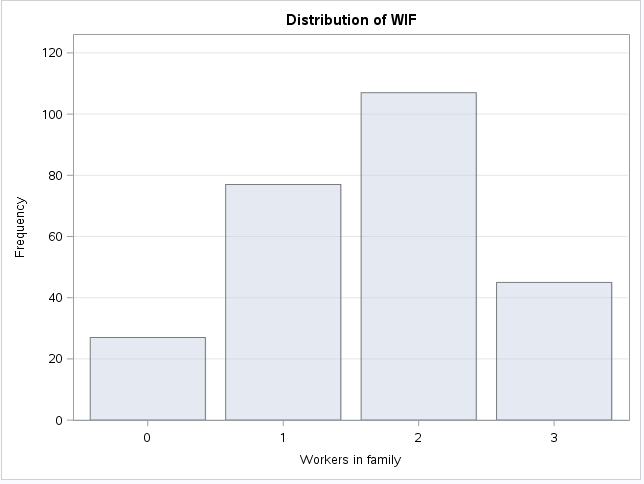
Cluster 12

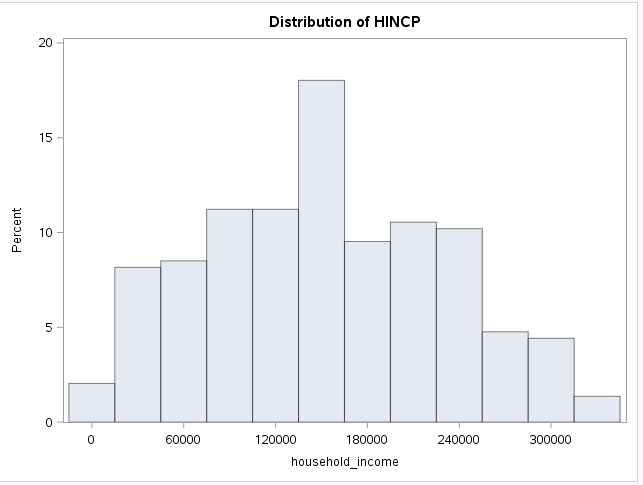


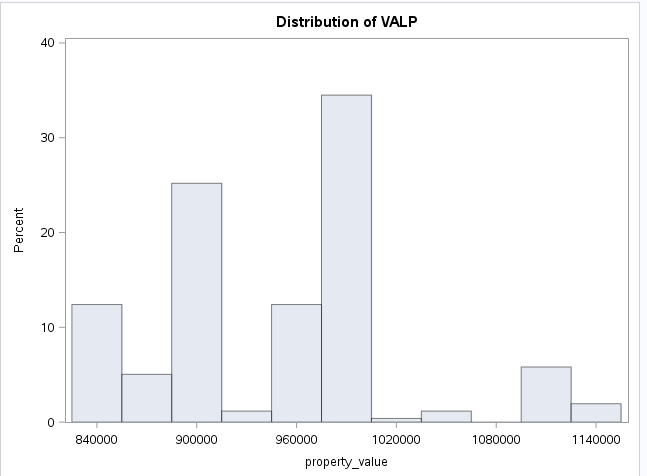




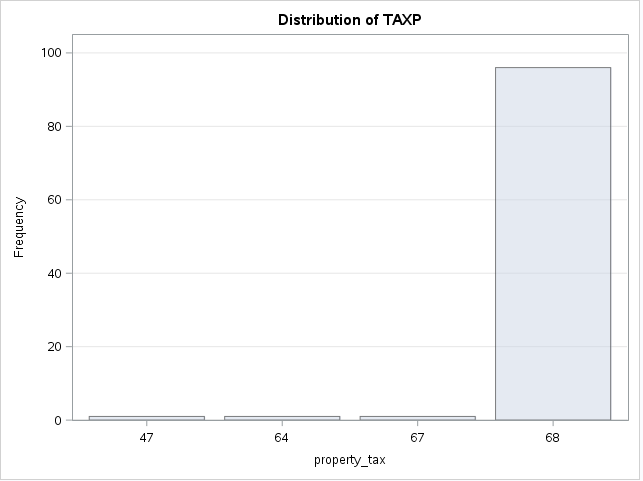


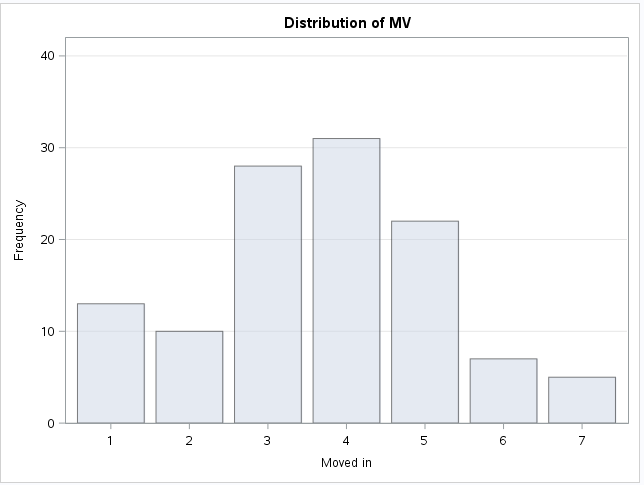


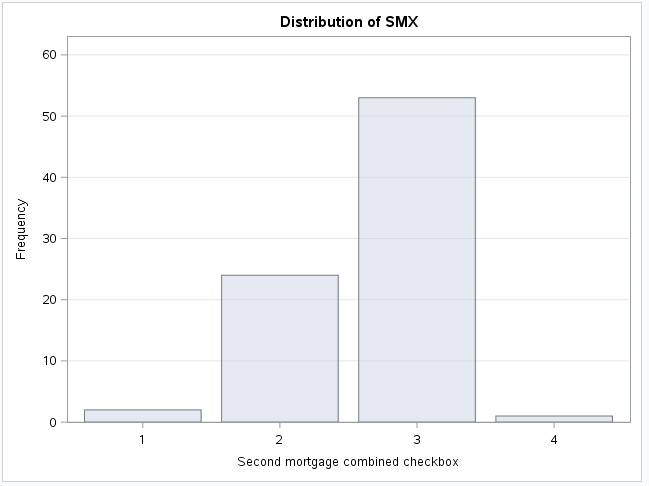


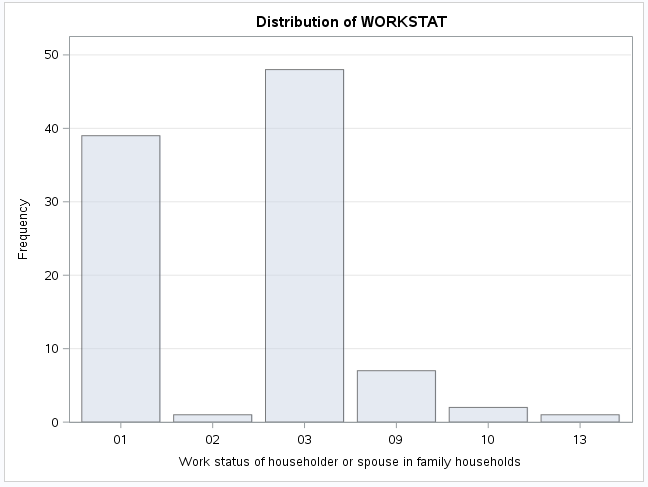


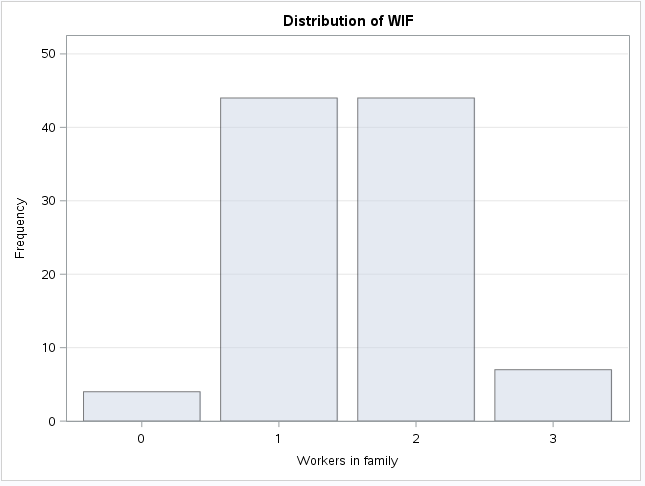
Cluster 13

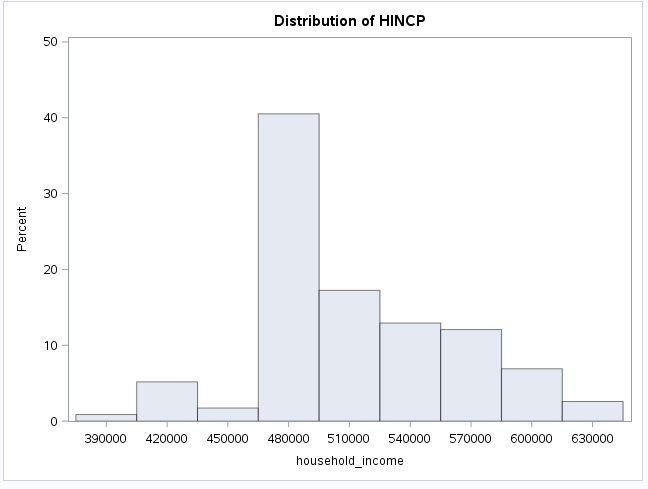


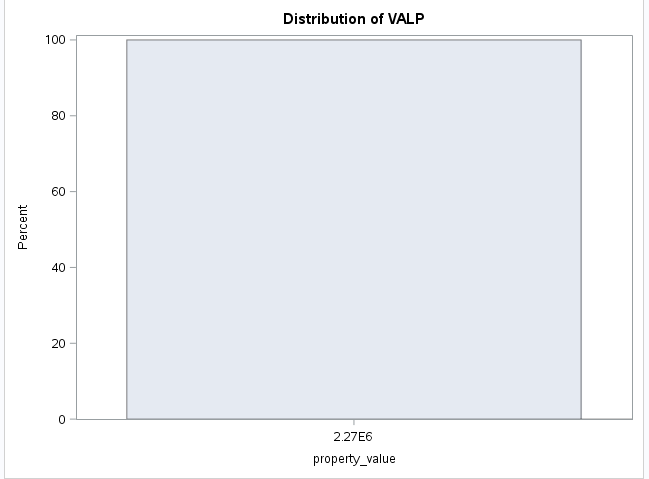




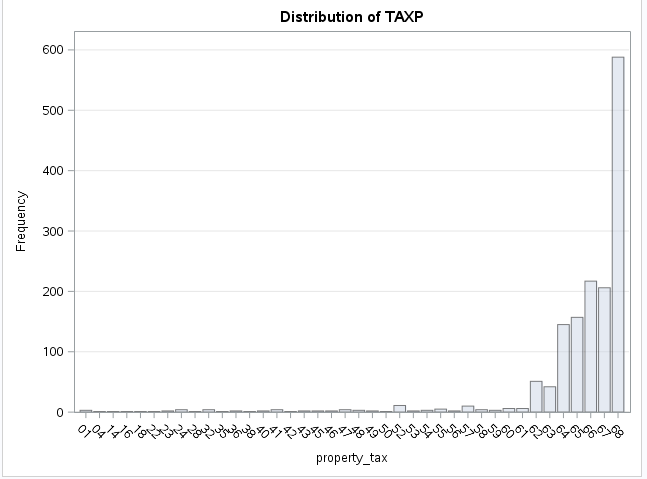


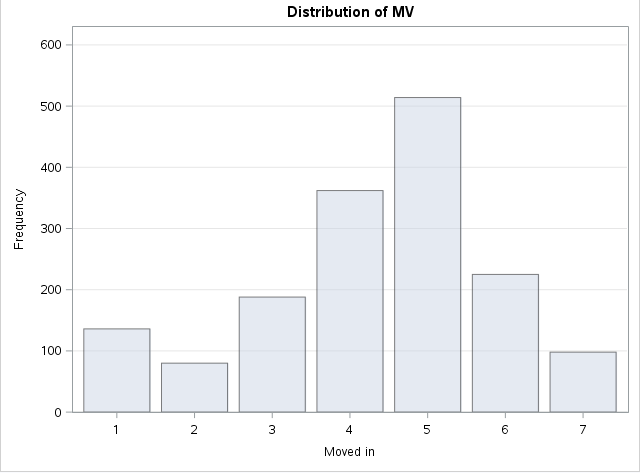


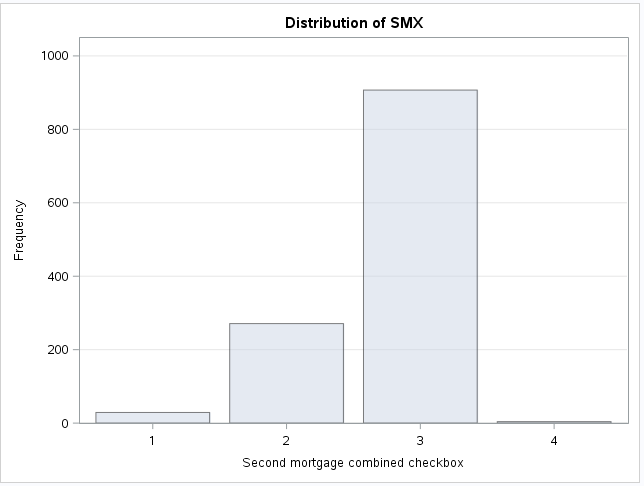


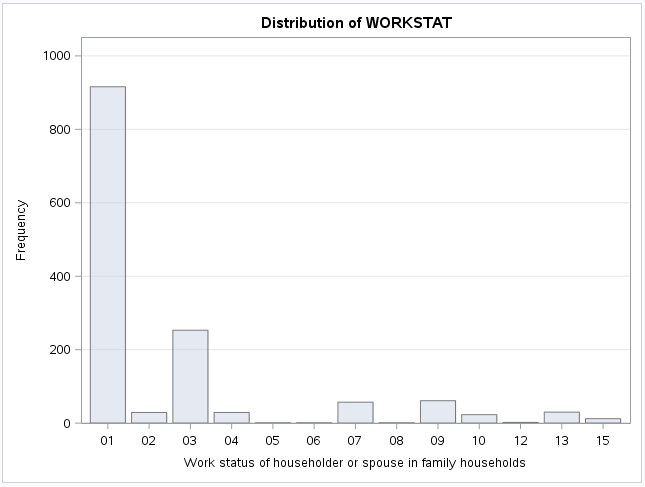


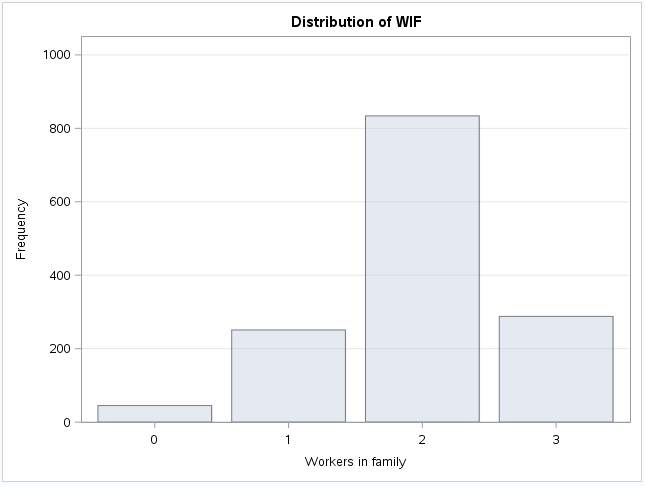
Cluster 14

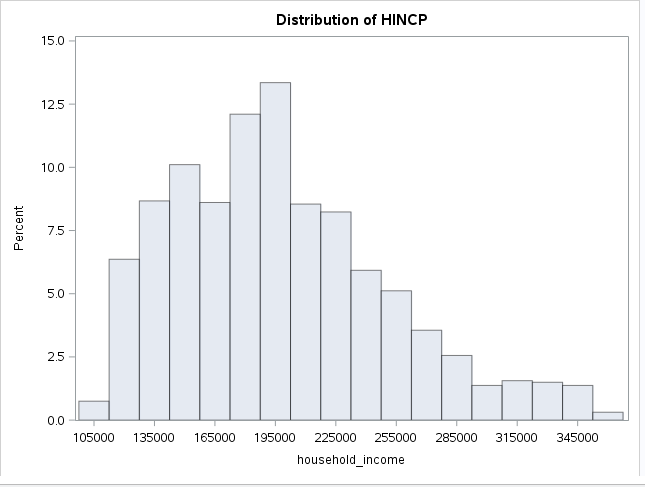


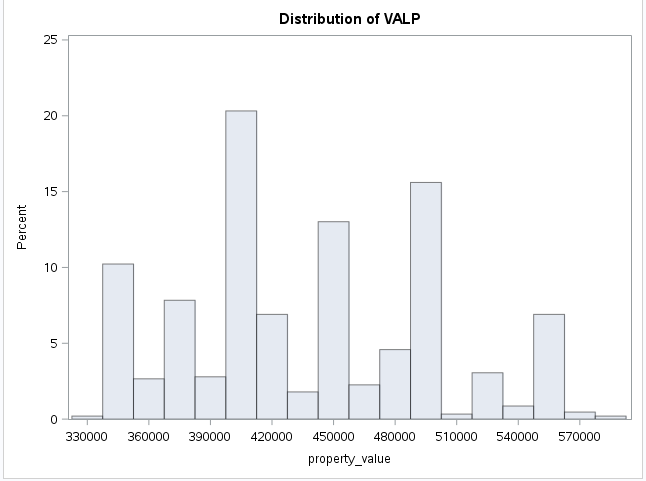




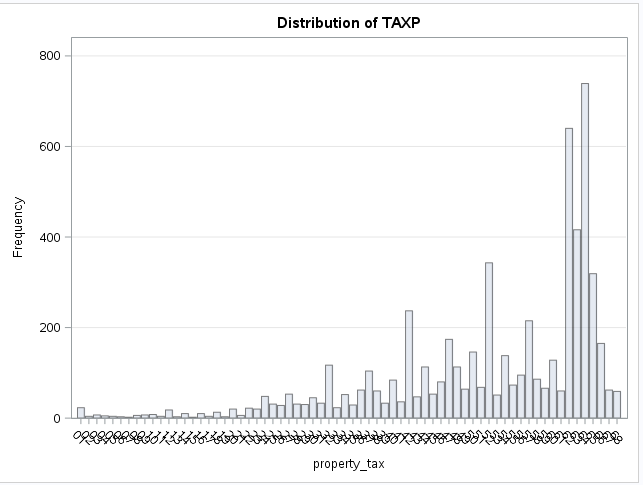


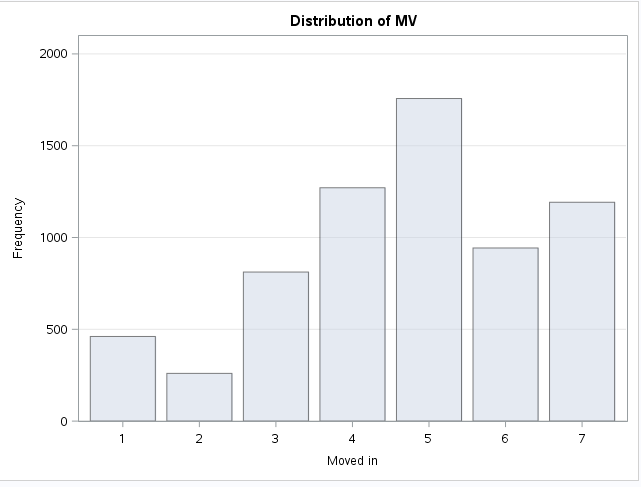


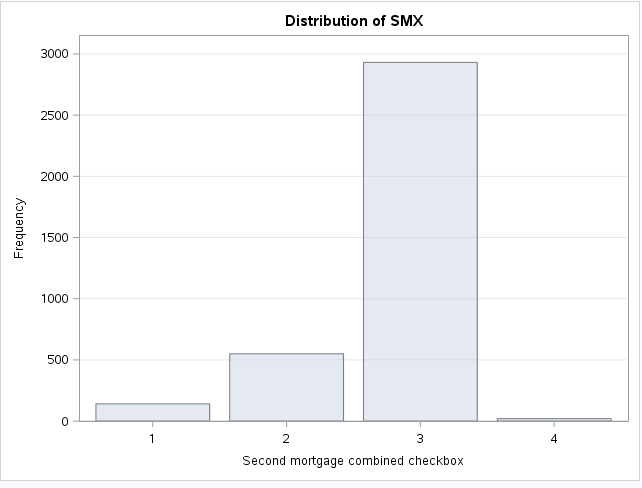


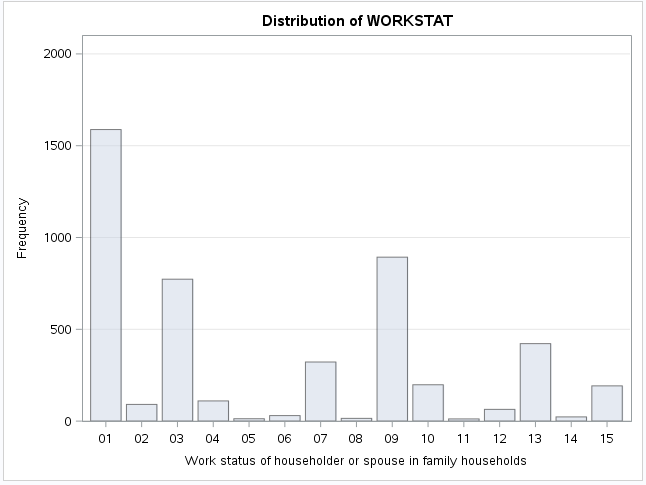


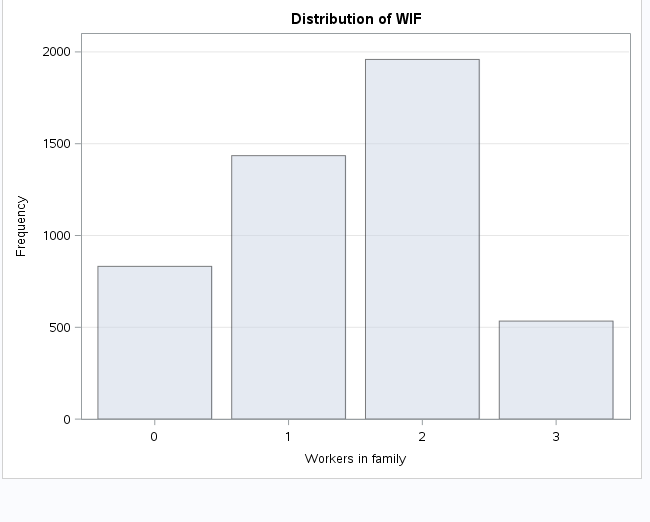
Cluster 15

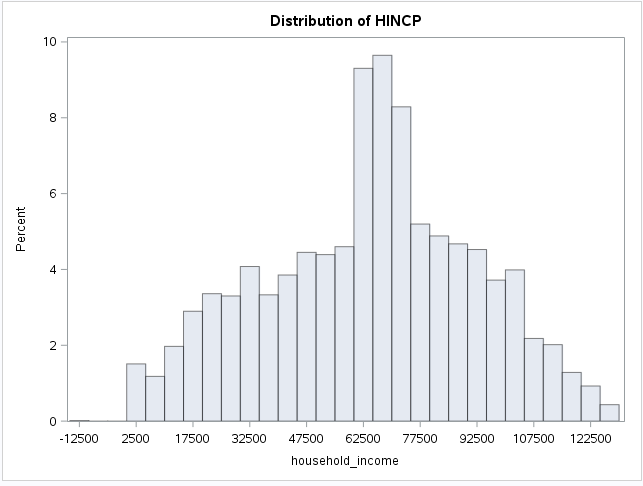


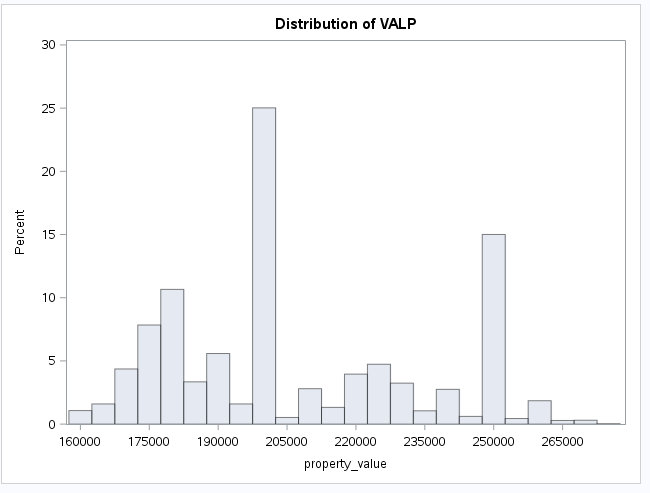




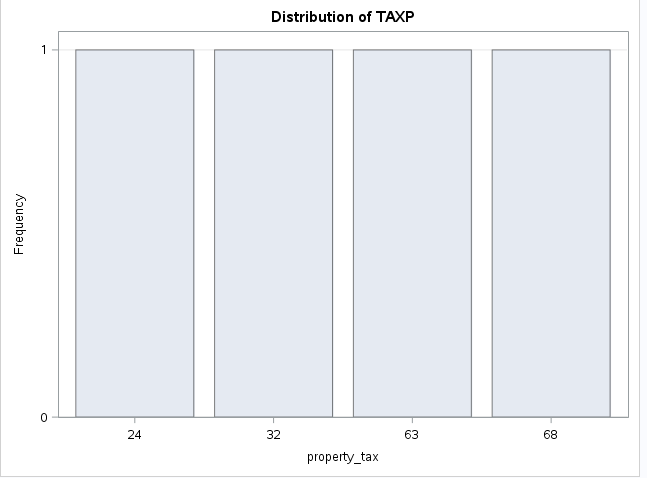


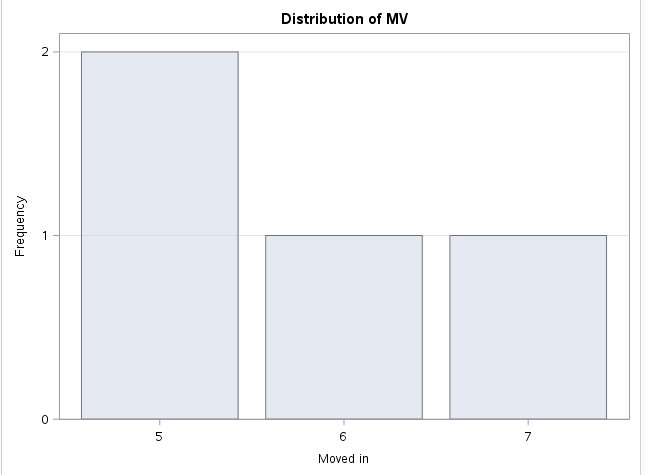


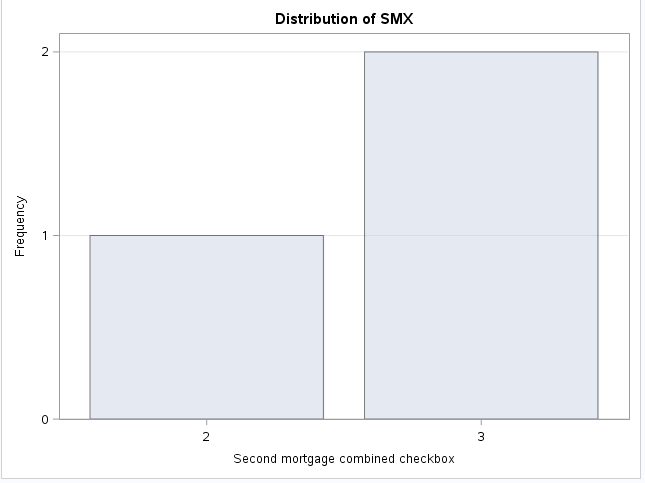


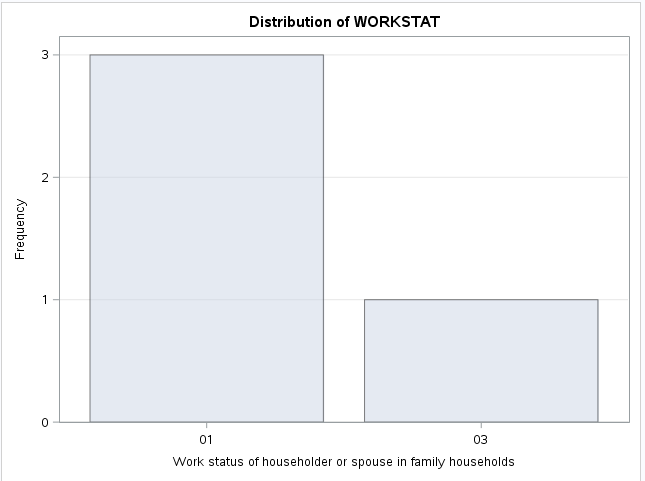


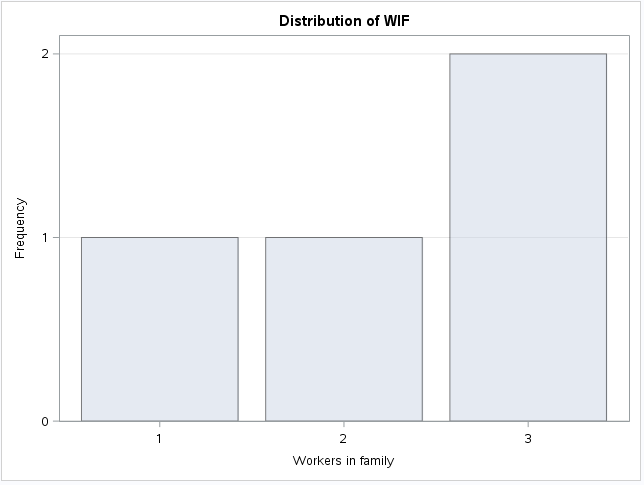
Cluster 16

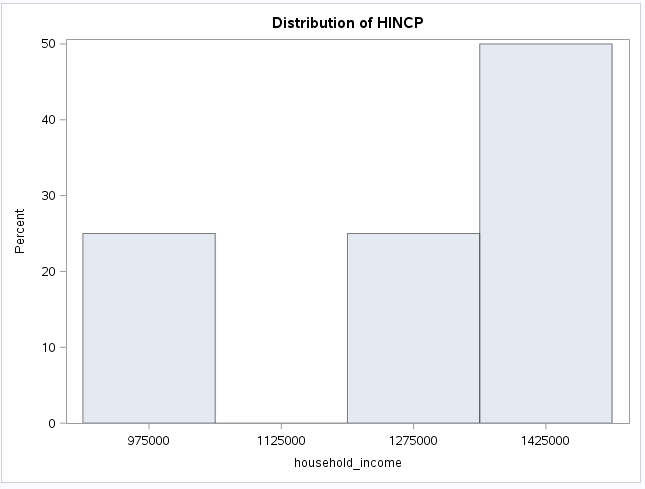


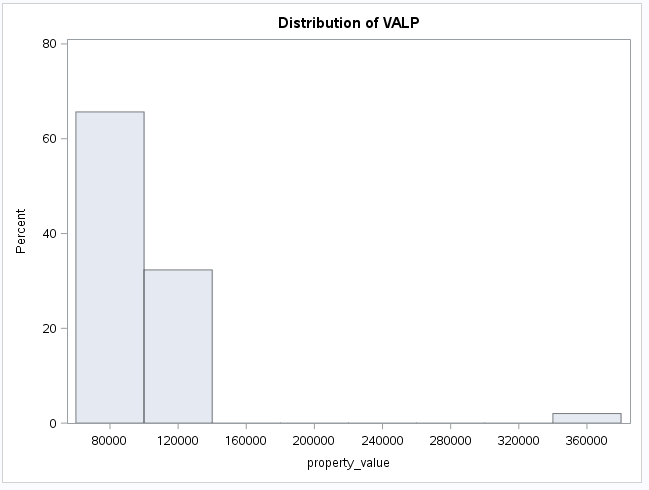




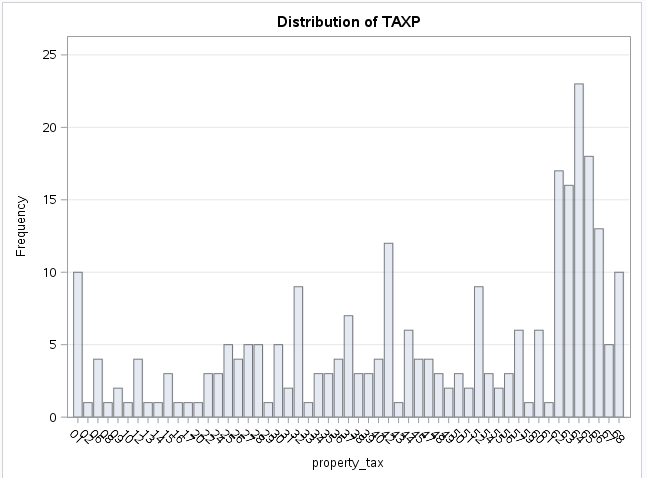


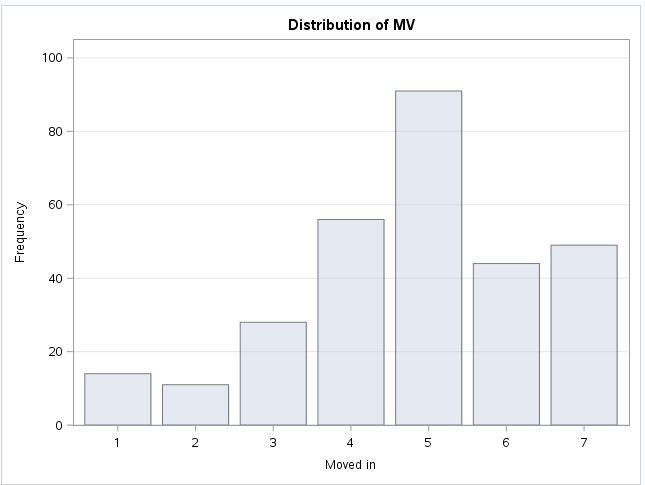


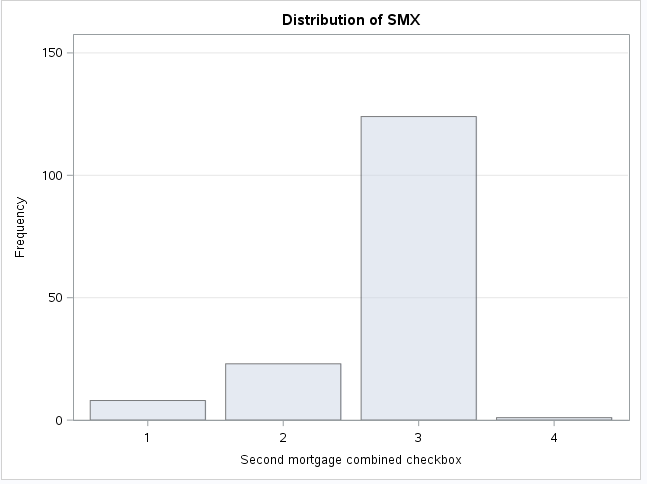


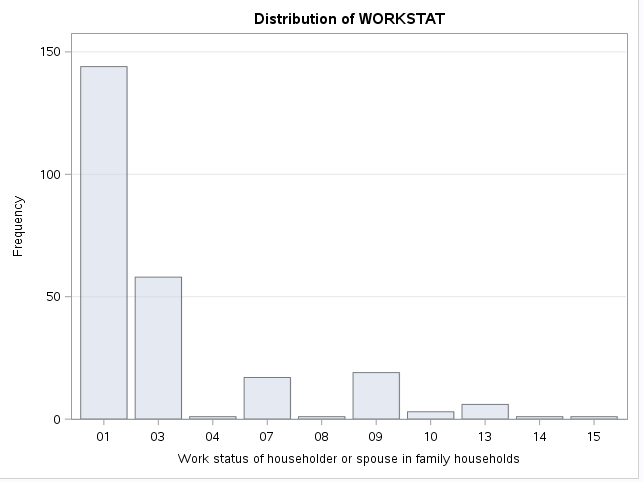


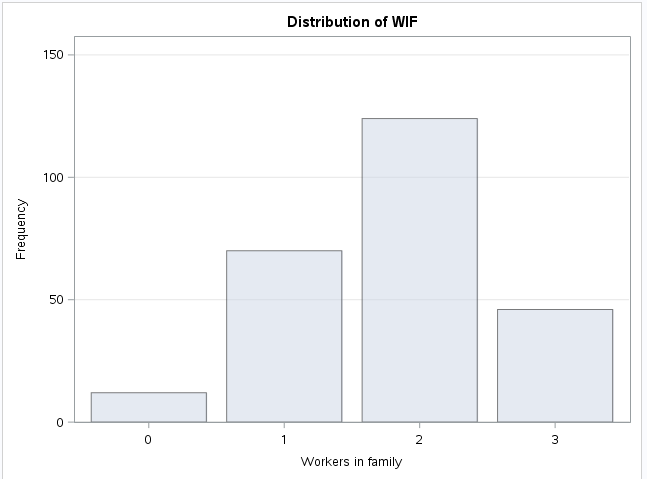
Cluster 17

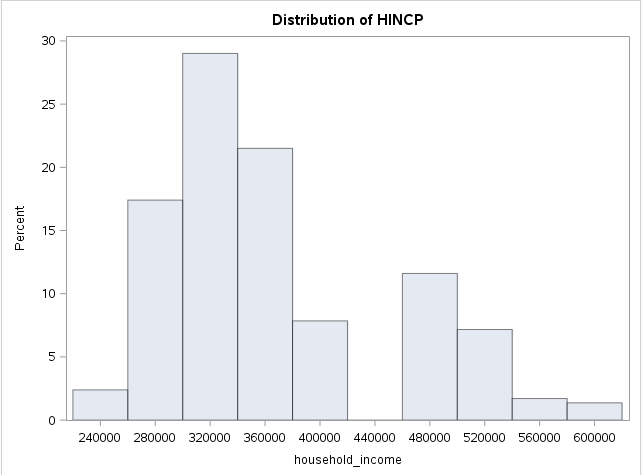


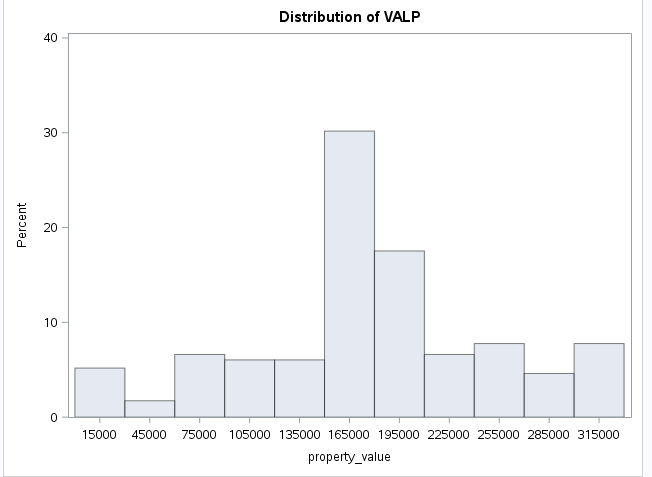




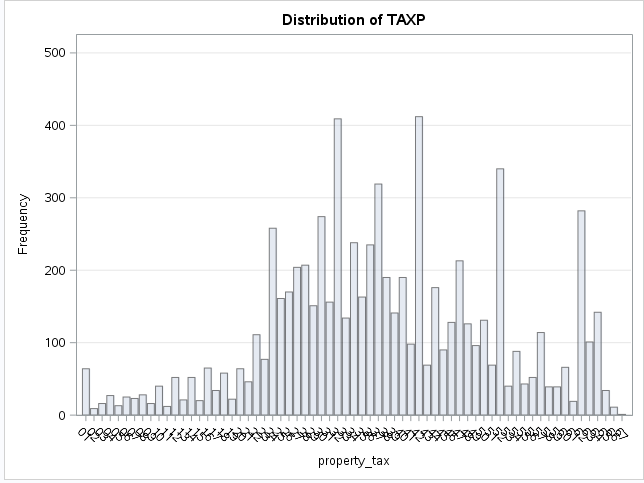


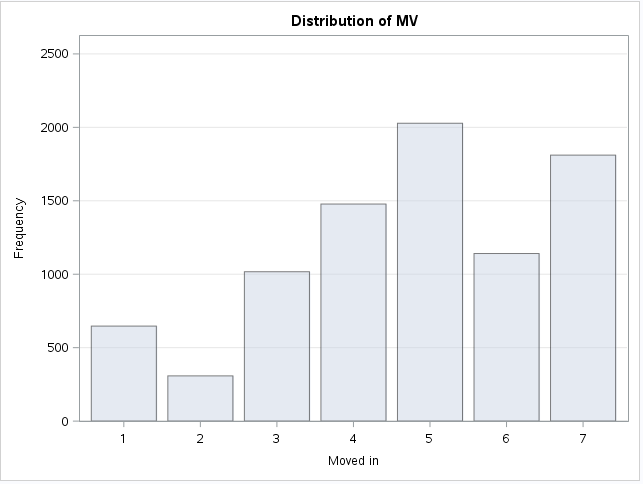


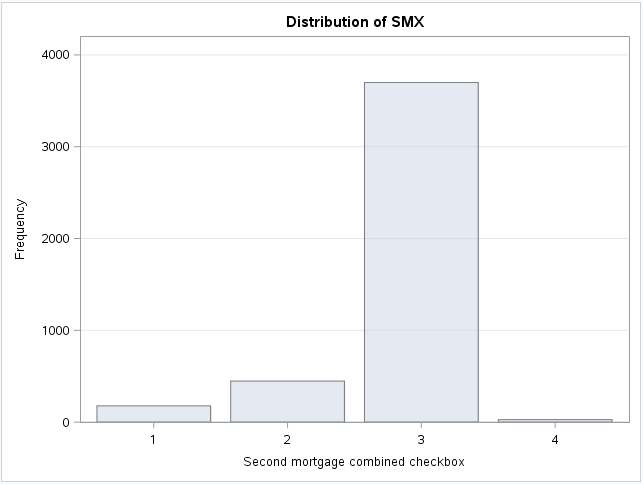


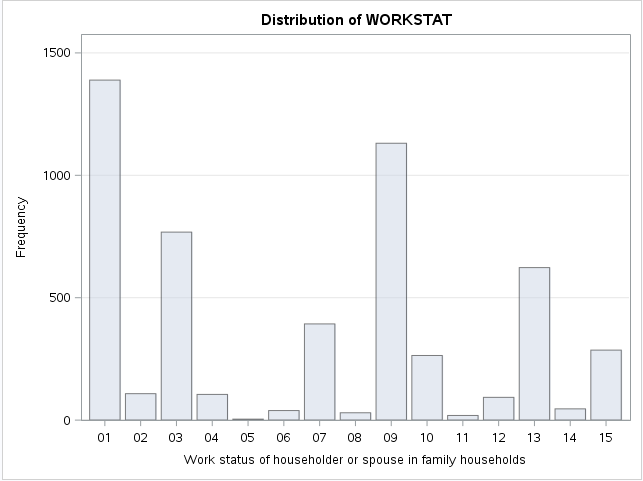


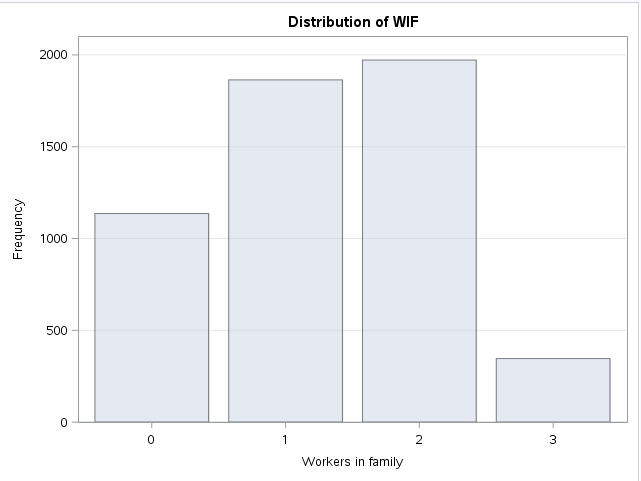
Cluster 18

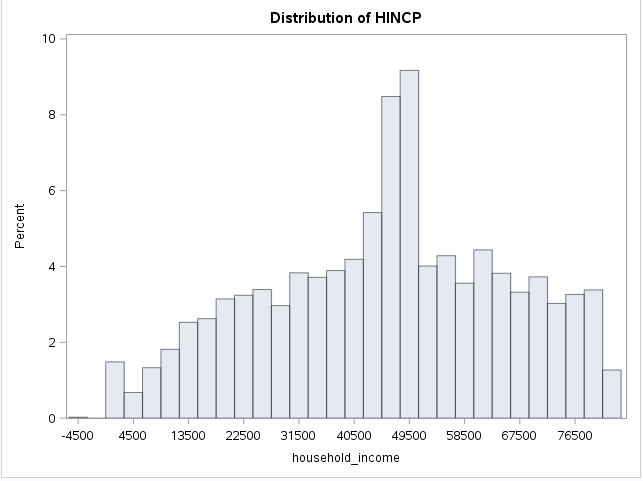


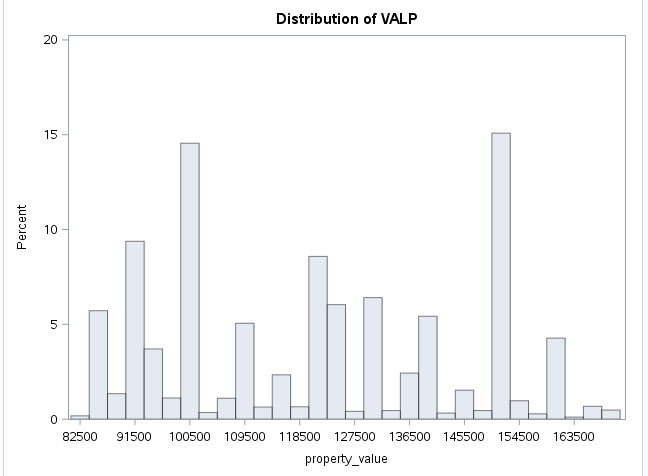




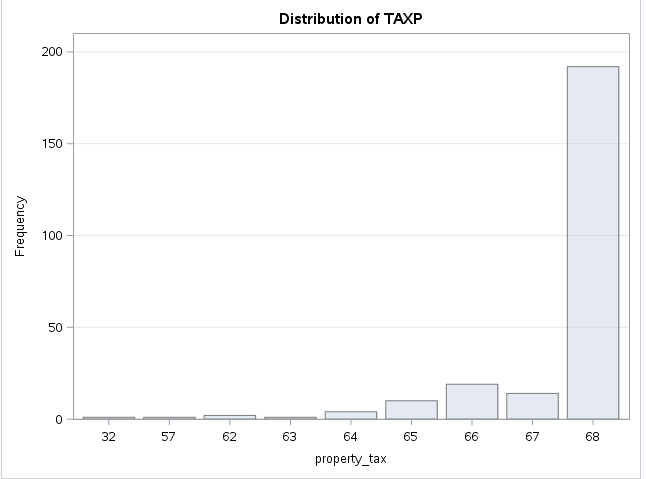


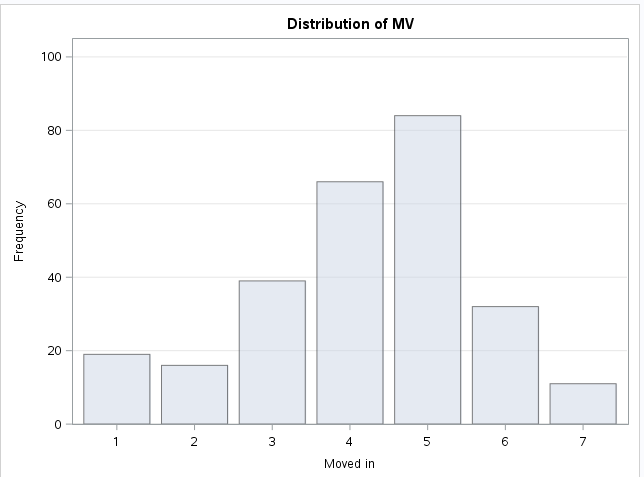


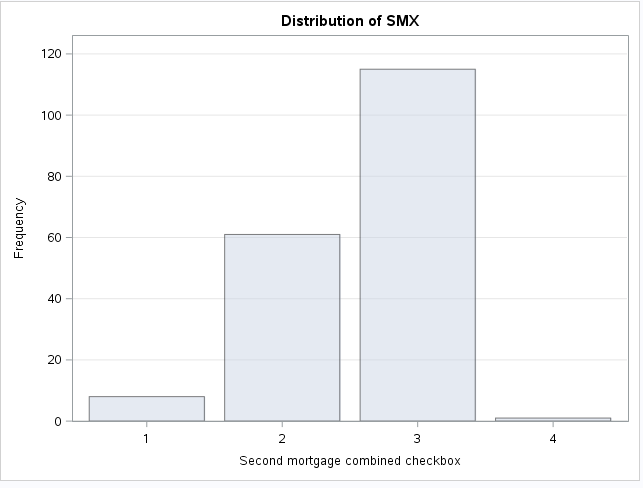


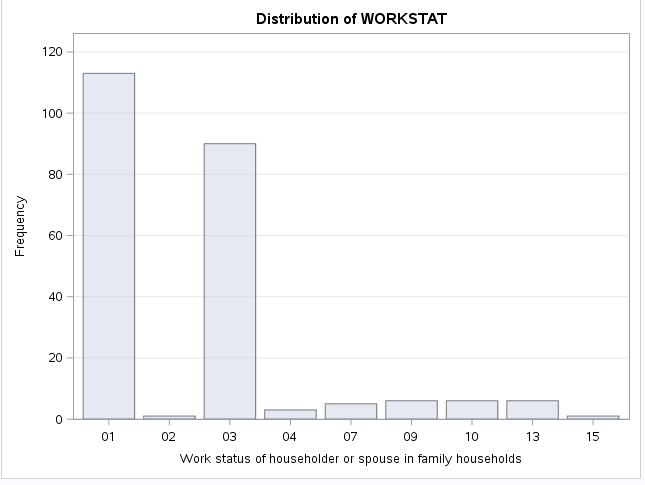


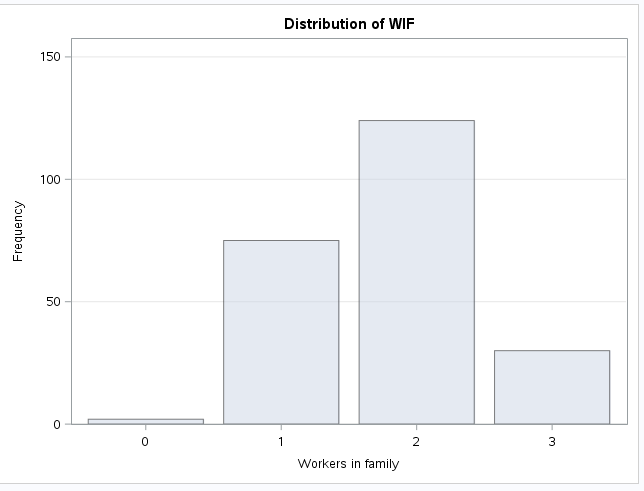
Cluster 19

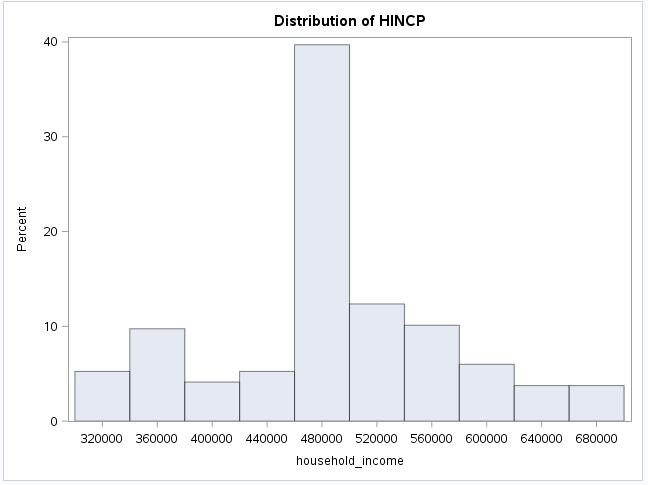


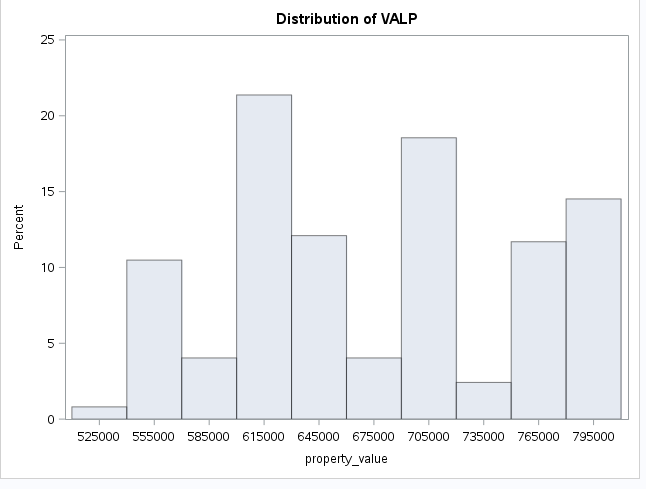


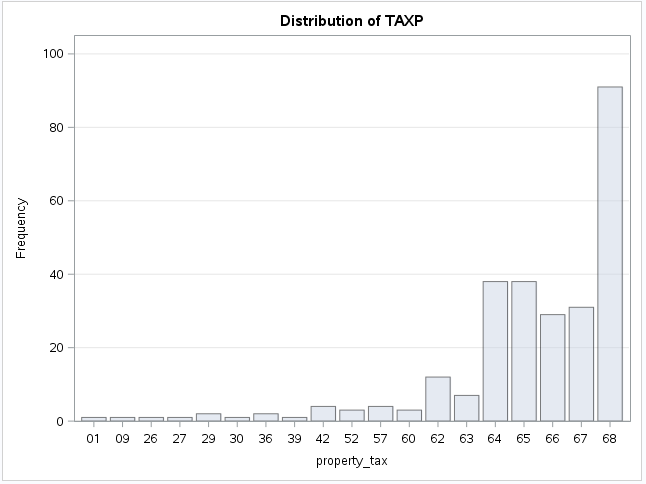












proc fastclus data=census.psam\_h17\_subset1

radius=0 replace=full

converge=0 maxiter=200

maxclusters=20

OUTSTAT=census.psam\_h17\_subset1\_20clusters\_stat

OUT=census.psam\_h17\_subset1\_20clusters

distance;

id SERIALNO;

var VALP HINCP;

run;

proc sgplot;

scatter y=HINCP x=VALP / group=cluster;

title ’ACS PUMS 2013 1 YR 20-Cluster Analysis’;

title2 ’of Data Containing Property Value and Household Income’;

run;

proc standard data=census.psam\_h17\_subset1 out=Stand mean=0 std=1;

var VALP HINCP;

run;

proc fastclus data=Stand

radius=0 replace=full

converge=0 maxiter=200

maxclusters=20

OUTSTAT=subset1\_20clus\_stat\_stan OUT=subset1\_20clus\_stan

distance;

id SERIALNO;

var VALP HINCP;

run;

proc sgplot;

scatter y=HINCP x=VALP / group=cluster;

title ’ACS PUMS 2013 1 YR 20-Cluster Analysis (w standardized data)’;

title2 ’of Data Containing Property Value and Household Income’;

run;

**stand**

proc standard data=census.psam\_h17\_subset1 out=Stand mean=0 std=1;

var VALP HINCP;

run;

proc fastclus data=Stand

radius=0 replace=full

converge=0 maxiter=200

maxclusters=20

OUTSTAT=subset1\_20clus\_stat\_stan OUT=census.subset1\_20clus\_stan

distance;

id SERIALNO;

var VALP HINCP;

run;

proc sgplot;

scatter y=HINCP x=VALP / group=cluster;

title ’ACS PUMS 2013 1 YR 20-Cluster Analysis (w standardized data)’;

title2 ’of Data Containing Property Value and Household Income’;

run;

**agg stand**

proc standard data=census.psam\_h17\_subset1 out=Stand mean=0 std=1;

var VALP HINCP;

run;

proc fastclus data=Stand

radius=0 replace=full

converge=0 maxiter=200

maxclusters=20

OUTSTAT=subset1\_20clus\_stat\_stan OUT=census.subset1\_20clus\_stan

distance;

id SERIALNO;

var VALP HINCP;

run;

proc sgplot;

scatter y=HINCP x=VALP / group=cluster;

title ’ACS PUMS 2013 1 YR 20-Cluster Analysis (w standardized data)’;

title2 ’of Data Containing Property Value and Household Income’;

run;

**Cluster 1**

proc sql;

title 'Cluster #20 aggregated information for profiling';

create table census.psam\_h17\_subset1\_clus\_1\_agg\_stan as

select \*

from census.psam\_h17\_subset1\_20clus\_agg\_stan

where CLUSTER=1;

run;

**grp a**

proc sql;

select group,cluster,scheme,count(\*) as frequency,sum(TAXP\_INCREASE) as total from census.psam\_h17\_subset1\_cluster\_tax

group by group,cluster,scheme;

run;

proc sql;

select group,sum(TAXP\_INCREASE) as total from census.psam\_h17\_subset1\_cluster\_tax

group by group;

run;

proc sql;

select sum(TAXP\_INCREASE) as total from census.psam\_h17\_subset1\_cluster\_tax;

run;

proc sql;

create table census.psam\_h17\_subset1\_cluster\_tax as

select 'A' as GROUP,a.\*, b.AVG,case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then '30% Tax Increase'

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then '25% Tax Increase'

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then '20% Tax Increase'

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '15% Tax Increase'

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '10% Tax Increase'

else 'No Tax Increase' end as SCHEME,

case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.3)

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.25)

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then (b.AVG\*0.20)

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.15)

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.10)

else 0 end as TAXP\_INCREASE

from census.psam\_h17\_subset1\_cluster\_agg20 as a left join

census.tax\_lkp as b

on input(a.taxp,18.) =b.No\_

union all

select 'A' as GROUP,a.\*, b.AVG, case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then '30% Tax Increase'

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then '25% Tax Increase'

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then '20% Tax Increase'

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '15% Tax Increase'

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '10% Tax Increase'

else 'No Tax Increase' end as SCHEME,

case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.3)

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.25)

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then (b.AVG\*0.20)

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.15)

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.10)

else 0 end as TAXP\_INCREASE

from census.psam\_h17\_subset1\_cluster\_agg8 as a left join

census.tax\_lkp as b

on input(a.taxp,18.) =b.No\_

union all

select 'A' as GROUP,a.\*, b.AVG, case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then '30% Tax Increase'

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then '25% Tax Increase'

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then '20% Tax Increase'

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '15% Tax Increase'

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '10% Tax Increase'

else 'No Tax Increase' end as SCHEME,

case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.3)

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.25)

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then (b.AVG\*0.20)

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.15)

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.10)

else 0 end as TAXP\_INCREASE

from census.psam\_h17\_subset1\_cluster\_agg6 as a left join

census.tax\_lkp as b

on input(a.taxp,18.) =b.No\_

union all

select 'A' as GROUP,a.\*, b.AVG,case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then '30% Tax Increase'

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then '25% Tax Increase'

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then '20% Tax Increase'

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '15% Tax Increase'

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '10% Tax Increase'

else 'No Tax Increase' end as SCHEME,

case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.3)

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.25)

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then (b.AVG\*0.20)

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.15)

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.10)

else 0 end as TAXP\_INCREASE

from census.psam\_h17\_subset1\_cluster\_agg11 as a left join

census.tax\_lkp as b

on input(a.taxp,18.) =b.No\_

union all

select 'A' as GROUP,a.\*, b.AVG,case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then '30% Tax Increase'

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then '25% Tax Increase'

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then '20% Tax Increase'

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '15% Tax Increase'

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '10% Tax Increase'

else 'No Tax Increase' end as SCHEME,

case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.3)

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.25)

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then (b.AVG\*0.20)

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.15)

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.10)

else 0 end as TAXP\_INCREASE

from census.psam\_h17\_subset1\_cluster\_agg12 as a left join

census.tax\_lkp as b

on input(a.taxp,18.) =b.No\_

union all

select 'A' as GROUP,a.\*, b.AVG,case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then '30% Tax Increase'

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then '25% Tax Increase'

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then '20% Tax Increase'

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '15% Tax Increase'

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '10% Tax Increase'

else 'No Tax Increase' end as SCHEME,

case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.3)

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.25)

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then (b.AVG\*0.20)

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.15)

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.10)

else 0 end as TAXP\_INCREASE

from census.psam\_h17\_subset1\_cluster\_agg13 as a left join

census.tax\_lkp as b

on input(a.taxp,18.) =b.No\_

union all

select 'B' as GROUP,a.\*, b.AVG,case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then '30% Tax Increase'

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then '25% Tax Increase'

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then '20% Tax Increase'

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '15% Tax Increase'

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '10% Tax Increase'

else 'No Tax Increase' end as SCHEME,

case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.3)

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.25)

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then (b.AVG\*0.20)

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.15)

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.10)

else 0 end as TAXP\_INCREASE

from census.psam\_h17\_subset1\_cluster\_agg4 as a left join

census.tax\_lkp as b

on input(a.taxp,18.) =b.No\_

union all

select 'B' as GROUP,a.\*, b.AVG,case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then '30% Tax Increase'

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then '25% Tax Increase'

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then '20% Tax Increase'

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '15% Tax Increase'

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '10% Tax Increase'

else 'No Tax Increase' end as SCHEME,

case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.3)

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.25)

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then (b.AVG\*0.20)

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.15)

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.10)

else 0 end as TAXP\_INCREASE

from census.psam\_h17\_subset1\_cluster\_agg7 as a left join

census.tax\_lkp as b

on input(a.taxp,18.) =b.No\_

union all

select 'B' as GROUP,a.\*, b.AVG,case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then '30% Tax Increase'

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then '25% Tax Increase'

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then '20% Tax Increase'

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '15% Tax Increase'

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '10% Tax Increase'

else 'No Tax Increase' end as SCHEME,

case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.3)

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.25)

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then (b.AVG\*0.20)

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.15)

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.10)

else 0 end as TAXP\_INCREASE

from census.psam\_h17\_subset1\_cluster\_agg9 as a left join

census.tax\_lkp as b

on input(a.taxp,18.) =b.No\_

union all

select 'B' as GROUP,a.\*, b.AVG, case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then '30% Tax Increase'

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then '25% Tax Increase'

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then '20% Tax Increase'

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '15% Tax Increase'

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '10% Tax Increase'

else 'No Tax Increase' end as SCHEME,

case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.3)

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.25)

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then (b.AVG\*0.20)

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.15)

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.10)

else 0 end as TAXP\_INCREASE

from census.psam\_h17\_subset1\_cluster\_agg10 as a left join

census.tax\_lkp as b

on input(a.taxp,18.) =b.No\_

union all

select 'B' as GROUP,a.\*, b.AVG, case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then '30% Tax Increase'

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then '25% Tax Increase'

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then '20% Tax Increase'

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '15% Tax Increase'

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '10% Tax Increase'

else 'No Tax Increase' end as SCHEME,

case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.3)

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.25)

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then (b.AVG\*0.20)

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.15)

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.10)

else 0 end as TAXP\_INCREASE

from census.psam\_h17\_subset1\_cluster\_agg14 as a left join

census.tax\_lkp as b

on input(a.taxp,18.) =b.No\_

union all

select 'B' as GROUP,a.\*, b.AVG, case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then '30% Tax Increase'

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then '25% Tax Increase'

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then '20% Tax Increase'

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '15% Tax Increase'

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '10% Tax Increase'

else 'No Tax Increase' end as SCHEME,

case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.3)

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.25)

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then (b.AVG\*0.20)

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.15)

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.10)

else 0 end as TAXP\_INCREASE

from census.psam\_h17\_subset1\_cluster\_agg17 as a left join

census.tax\_lkp as b

on input(a.taxp,18.) =b.No\_

union all

select 'B' as GROUP,a.\*, b.AVG, case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then '30% Tax Increase'

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then '25% Tax Increase'

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then '20% Tax Increase'

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '15% Tax Increase'

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '10% Tax Increase'

else 'No Tax Increase' end as SCHEME,

case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.3)

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.25)

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then (b.AVG\*0.20)

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.15)

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.10)

else 0 end as TAXP\_INCREASE

from census.psam\_h17\_subset1\_cluster\_agg19 as a left join

census.tax\_lkp as b

on input(a.taxp,18.) =b.No\_

union all

select 'C' as GROUP,a.\*, b.AVG, case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then '30% Tax Increase'

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then '25% Tax Increase'

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then '20% Tax Increase'

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '15% Tax Increase'

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '10% Tax Increase'

else 'No Tax Increase' end as SCHEME,

case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.3)

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.25)

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then (b.AVG\*0.20)

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.15)

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.10)

else 0 end as TAXP\_INCREASE

from census.psam\_h17\_subset1\_cluster\_agg3 as a left join

census.tax\_lkp as b

on input(a.taxp,18.) =b.No\_

union all

select 'C' as GROUP,a.\*, b.AVG,case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then '30% Tax Increase'

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then '25% Tax Increase'

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then '20% Tax Increase'

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '15% Tax Increase'

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '10% Tax Increase'

else 'No Tax Increase' end as SCHEME,

case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.3)

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.25)

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then (b.AVG\*0.20)

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.15)

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.10)

else 0 end as TAXP\_INCREASE

from census.psam\_h17\_subset1\_cluster\_agg15 as a left join

census.tax\_lkp as b

on input(a.taxp,18.) =b.No\_

union all

select 'C' as GROUP,a.\*, b.AVG, case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then '30% Tax Increase'

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then '25% Tax Increase'

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then '20% Tax Increase'

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '15% Tax Increase'

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '10% Tax Increase'

else 'No Tax Increase' end as SCHEME,

case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.3)

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.25)

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then (b.AVG\*0.20)

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.15)

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.10)

else 0 end as TAXP\_INCREASE

from census.psam\_h17\_subset1\_cluster\_agg18 as a left join

census.tax\_lkp as b

on input(a.taxp,18.) =b.No\_

union all

select 'D' as GROUP,a.\*, b.AVG,case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then '30% Tax Increase'

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then '25% Tax Increase'

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then '20% Tax Increase'

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '15% Tax Increase'

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '10% Tax Increase'

else 'No Tax Increase' end as SCHEME,

case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.3)

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.25)

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then (b.AVG\*0.20)

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.15)

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.10)

else 0 end as TAXP\_INCREASE

from census.psam\_h17\_subset1\_cluster\_agg1 as a left join

census.tax\_lkp as b

on input(a.taxp,18.) =b.No\_

union all

select 'D' as GROUP,a.\*, b.AVG,case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then '30% Tax Increase'

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then '25% Tax Increase'

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then '20% Tax Increase'

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '15% Tax Increase'

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then '10% Tax Increase'

else 'No Tax Increase' end as SCHEME,

case when (b.No\_=68 and a.VALP>2000000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.3)

when (b.No\_>=62 and a.VALP>=700000 and a.HINCP>150000 and VALP is not null) then (b.AVG\*0.25)

when (b.No\_>=62 and a.VALP<=700000 and a.HINCP>150000 and VALP is not null and VALP > 0) then (b.AVG\*0.20)

when (b.No\_>=37 and b.No\_<62 and a.HINCP>90000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.15)

when (b.No\_>=22 and b.No\_<37 and a.HINCP>70000 and a.WIF<>'1' and a.WORKSTAT not in ('15','9','12')

and VALP is not null and VALP > 0) then (b.AVG\*0.10)

else 0 end as TAXP\_INCREASE

from census.psam\_h17\_subset1\_cluster\_agg2 as a left join

census.tax\_lkp as b

on input(a.taxp,18.) =b.No\_;

run;