**Reproducing and Extending Published SCF**

***Federal Reserve Bulletin* Tables Using SDA**

Published *Federal Reserve Bulletin* tables can be reproduced and modified in the SDA on-line analysis program using the following instructions. Users who wish to create their own variants of existing tables—for example, tabulations for different demographic groups or for different years—are advised to follow the instructions and recreate the existing tables first, then read the follow-up notes about how to extend the tables to achieve their particular goals. Click below on the table you wish to recreate:

[Table 1](#_Toc396985387)

[Table 2](#_Toc396985388)

[Table 3](#_Toc396985389)

[Table 4](#_Toc396985390)

[Table 5](#_Toc396985391)

**Note: Estimates produced by SDA use the public version of the SCF data and may differ slightly from estimates produced using the internal SCF data in the *Federal Reserve Bulletin* article**

# **Table 1**

In order to create the first part of bulletin table 1, please follow these instructions:

1. Click the ‘Analysis’ button in the top left corner if it is not already selected
2. Click the ‘Means’ tab
3. Click on the triangle next to the folder next the word ‘INCOME’ in the bottom left panel of the screen
4. Click on ‘INCOME’ in the list of variables that has appeared beneath the ‘INCOME’ folder
5. In the upper left portion of the screen, ‘INCOME’ now appears in the text box after ‘Selected:’
6. Push the ‘Dep’ button underneath the text box. This copies the variable name into the Dependent text box to the right
7. Go back to the bottom left panel, to the variable folders. Click the ‘NINCCAT’ variable name under the ‘INCOME’ folder
8. Go up to the Upper left portion of the screen and push the ‘Row’ button beneath the ‘Selected:’ text box. This copies the variable name into the Row text box to the right
9. Go back to the bottom left panel, to the variable folders. Click the triangle next to the TECHNICAL folder
10. In the variable listing that has popped up, click on ‘YEAR’
11. Go up to the Upper left portion of the screen and push the ‘Col’ button beneath the ‘Selected:’ text box. This copies the variable name into the Column text box to the right
12. Now, press the ‘Filter’ button beneath the ‘Selected:’ text box. This copies the variable name into the Selection Filter text box to the right
13. In the filter text box, insert the following text in between the parentheses that appeared after the word ‘YEAR’ with no period: 2013-2016. This will limit the data to only those years.
14. Click the ‘Output Options’ dropdown button, then check the box next to ‘Median’
15. Click the ‘Run the Table’ button in the bottom

In order to create the remaining parts of the table, replace the Row variable with the following variables:

|  |  |  |
| --- | --- | --- |
| Table 1 Label | SDA Category | SDA Variable Name |
| Percentile of usual income | INCOME | NINCCAT |
| Age of head | DEMOGRAPHICS | AGECL |
| Education of head | DEMOGRAPHICS | EDCL |
| Race or ethnicity of respondent | DEMOGRAPHICS | RACECL |
| Current work status of head | DEMOGRAPHICS | OCCAT1 |
| Current Occupation of head | DEMOGRAPHICS | OCCAT2 |
| Housing status | DEMOGRAPHICS | HOUSECL |
| Percentile of net worth | NETWORTH | NWCAT |

It is easy to modify the SDA table further, if desired. For example, if one would like to see income by the family structure of the household, one would replace the Row variable with the ‘FAMSTRUCT’ variable under the DEMOGRAPHICS category.

Furthermore, if one wished to examine more survey years, or strictly historical years, one could adjust the filter variable. For example, to create a table of only the 1992 survey data, the text in the parentheses after ‘YEAR’ in the ‘Selection Filter(s):’ text box should be ‘1992’ without the quotation marks.

# **Table 2**

In order to create the first part of bulletin table 2, please follow these instructions:

1. Click the ‘Analysis’ button in the top left corner if not already selected
2. Click the ‘Means’ tab
3. Click on the triangle next to the folder next the word ‘NETWORTH’ in the bottom left panel of the screen
4. Click on ‘NETWORTH’ in the list of variables that has appeared beneath the ‘NETWORTH’ folder
5. In the upper left portion of the screen, ‘NETWORTH’ now appears in the text box after ‘Selected:’
6. Push the ‘Dep’ button underneath the text box. This copies the variable name into the Dependent text box to the right
7. Go back to the bottom left panel, to the variable folders. Click the ‘NINCCAT’ variable name under the ‘INCOME’ folder
8. Go up to the Upper left portion of the screen and push the ‘Row’ button beneath the ‘Selected:’ text box. This copies the variable name into the Row text box to the right
9. Go back to the bottom left panel, to the variable folders. Click the triangle next to the TECHNICAL folder
10. In the variable listing that has popped up, click on ‘YEAR’
11. Go up to the Upper left portion of the screen and push the ‘Col’ button beneath the ‘Selected:’ text box. This copies the variable name into the Column text box to the right
12. Now, press the ‘Filter’ button beneath the ‘Selected:’ text box. This copies the variable name into the Selection Filter text box to the right
13. In the filter text box, insert the following text in between the parentheses that appeared after the word ‘YEAR’ with no period: 2013-2016. This will limit the data to only those years.
14. In the ‘Output Options’ dropdown menu, check the box next to ‘Median’
15. Click the ‘Run the Table’ button in the bottom

In order to create the remaining parts of the table, replace the Row variable with the following variables:

|  |  |  |
| --- | --- | --- |
| Table 2 Label | SDA Category | SDA Variable Name |
| Percentile of usual income | INCOME | NINCCAT |
| Age of head | DEMOGRAPHICS | AGECL |
| Education of head | DEMOGRAPHICS | EDCL |
| Race or ethnicity of respondent | DEMOGRAPHICS | RACECL |
| Current work status of head | DEMOGRAPHICS | OCCAT1 |
| Current Occupation of head | DEMOGRAPHICS | OCCAT2 |
| Housing status | DEMOGRAPHICS | HOUSECL |
| Percentile of net worth | NETWORTH | NWCAT |

It is easy to modify the SDA table further, if desired. For example, if one would like to see income by the family structure of the household, one would replace the Row variable with the ‘FAMSTRUCT’ variable under the DEMOGRAPHICS category.

Furthermore, if one wished to examine more survey years, or strictly historical years, one could adjust the filter variable. For example, to create a table of only the 1992 survey data, the text in the parentheses after ‘YEAR’ in the ‘Selection Filter(s):’ text box should be ‘1992’ without the quotation marks.

# **Table 3**

In order to create the first part of bulletin table 3, please follow these instructions:

Percent Holding

1. Click the ‘Create Variables’ button in the top left corner
2. Click the ‘Recode’ tab
3. In the ‘Name for the new variable to be created:’ text box in the top right portion of the page, enter the name ‘HASSET’ without quote.
4. In the ‘Name(s) of existing variables to use for the recode:’ enter ASSET
5. In the table that appears after clicking on the red text below, under ‘Value’, in the first row enter a 1, and in the second row enter a 2
6. Under ‘Label,’ enter ‘Has Asset’ in the first row, and ‘Does not have asset’ in the second row
7. Under ‘ASSET,’ enter ‘1-\*’ in the first row, and ‘\*-0’ in the second row, both without quotes
8. Scroll down to the ‘Start Recoding’ button and push it. This will create a new variable where the value of the variable is 1 if the household has financial assets and 2 if they do not.
9. Close the window that popped up
10. Click the ‘Analysis’ button in the upper left corner of the screen.
11. Click the ‘Tables’ tab
12. In the ‘Row:’ textbox, enter the name of the new variable just created, ‘HASSET’
13. Go to the bottom left panel, to the variable folders. Click the triangle next to the TECHNICAL folder
14. In the variable listing that has popped up, click on ‘YEAR’
15. Go up to the Upper left portion of the screen and push the ‘Col’ button beneath the ‘Selected:’ text box. This copies the variable name into the Column text box to the right
16. Now, press the ‘Filter’ button beneath the ‘Selected:’ text box. This copies the variable name into the Selection Filter text box to the right
17. In the filter text box, insert the following text in between the parentheses that appeared after the word ‘YEAR’ with no period: 2013-2016. This will limit the data to only those years.
18. Click the ‘Run the Table’ button in the bottom

Conditional Median and Mean Values

1. Click the ‘Analysis’ button in the top left corner if not already selected
2. Click the ‘Means’ tab
3. Click on ‘ASSET’ in the list of variables that appears beneath the ‘ASSET’ directory in the bottom left portion of the page
4. In the upper left portion of the screen, ‘ASSET’ now appears in the text box after ‘Selected:’
5. Push the ‘Dep’ button underneath the text box. This copies the variable name into the Dependent text box to the right
6. Go back to the bottom left panel, to the TECHNICAL directory
7. In the variable listing, click on ‘YEAR’
8. Go up to the Upper left portion of the screen and push the ‘Row’ button beneath the ‘Selected:’ text box. This copies the variable name into the Row text box to the right
9. Now, press the ‘Filter’ button beneath the ‘Selected:’ text box. This copies the variable name into the Selection Filter text box to the right
10. In the filter text box, insert the following text in between the parentheses that appeared after the word ‘YEAR’ with no period: 2013-2016. This will limit the data to only those years
11. Insert one space, then enter the following text: HASSET(1)
12. This will limit the data to only those households with financial assets
13. Click the ‘Output Options’ dropdown box below, then check the box next to ‘Median’
14. Click the ‘Run the Table’ button in the bottom

In order to create the remaining parts of the table, replace the ASSET variable with the following variables from the ‘ASSETS’ variable list and name the ‘HASSET’ variable something comparable:

|  |  |
| --- | --- |
| Table 3 Label | SDA Variable |
| Any Financial Asset | FIN |
| Transaction accounts | LIQ |
| Certificates of deposit | CDS |
| Savings bonds | SAVBND |
| Bonds | BOND |
| Stocks | STOCKS |
| Pooled investment funds | NMMF |
| Retirement accounts | RETQLIQ |
| Cash value life insurance | CASHLI |
| Other managed assets | OTHMA |
| Other | OTHFIN |
| Any Nonfinancial Asset | NFIN |
| Vehicles | VEHIC |
| Primary residence | HOUSES |
| Other residential property | ORESRE |
| Equity in nonresidential property | NNRESRE |
| Business equity | BUS |
| Other | OTHFIN |

It is easy to modify the SDA table further, if desired. For example, if one would like to see one of these assets split up by the family structure of the household, one would insert ‘FAMSTRUCT’ into the Column variable.

Furthermore, if one wished to examine more survey years, or strictly historical years, one could adjust the filter variable. For example, to create a table of only the 1992 survey data, the text in the parentheses after ‘YEAR’ in the ‘Selection Filter(s):’ text box should be ‘1992’ without the quotation marks.

# **Table 4**

In order to create the first part of bulletin table 4, please follow these instructions:

Percent Holding

1. Click the ‘Create Variables’ button in the top left corner
2. Click the ‘Recode’ tab
3. In the ‘Name for the new variable to be created:’ text box in the top right portion of the page, enter the name ‘HDEBT’ without quote.
4. In the ‘Name(s) of existing variables to use for the recode:’ enter the variable name ‘DEBT’ without quotes
5. Click on the red text below
6. In the table that appears, enter a value of 1 in the first row under ‘Value’ and a value of 2 in the second row under ‘Value’
7. Under ‘Label,’ enter ‘Has debt’ in the first row, and ‘Does not have debt’ in the second row
8. Under ‘DEBT,’ enter ‘1-\*’ in the first row, and ‘\*-0’ in the second row, both without quotes
9. Scroll down to the ‘Start Recoding’ button and push it. This will create a new variable where the value of the variable is 1 if the household has financial assets and 2 if they do not.
10. Close the window that popped up
11. Click the ‘Analysis’ button in the upper left corner of the screen.
12. Click the ‘Tables’ tab
13. In the ‘Row:’ textbox, enter the name of the new variable just created, ‘HDEBT’
14. Go to the bottom left panel, to the variable folders. Click the triangle next to the TECHNICAL folder
15. In the variable listing that has popped up, click on ‘YEAR’
16. Go up to the Upper left portion of the screen and push the ‘Col’ button beneath the ‘Selected:’ text box. This copies the variable name into the Column text box to the right
17. Now, press the ‘Filter’ button beneath the ‘Selected:’ text box. This copies the variable name into the Selection Filter text box to the right
18. In the filter text box, insert the following text in between the parentheses that appeared after the word ‘YEAR’ with no period: 2013-2016. This will limit the data to only those years.
19. Click the ‘Run the Table’ button in the bottom

Conditional Median and Mean Values

1. Click the ‘Analysis’ button in the top left corner
2. Click the ‘Means’ tab
3. Click on ‘DEBT’ in the list of variables that appears beneath the ‘DEBTS’ directory in the bottom left portion of the page
4. In the upper left portion of the screen, ‘DEBT’ now appears in the text box after ‘Selected:’
5. Push the ‘Dep’ button underneath the text box. This copies the variable name into the Dependent text box to the right
6. Go back to the bottom left panel, to the TECHNICAL directory
7. In the variable listing, click on ‘YEAR’
8. Go up to the Upper left portion of the screen and push the ‘Row’ button beneath the ‘Selected:’ text box. This copies the variable name into the Row text box to the right
9. Now, press the ‘Filter’ button beneath the ‘Selected:’ text box. This copies the variable name into the Selection Filter text box to the right
10. In the filter text box, insert the following text in between the parentheses that appeared after the word ‘YEAR’ with no period: 2013-2016. This will limit the data to only those years
11. Insert one space, then enter the following text: HDEBT(1)
12. This will limit the data to only those households with financial assets
13. In the ‘TABLE OPTIONS’ box below, check the box next to ‘Median’
14. Click the ‘Run the Table’ button in the bottom

In order to create the remaining parts of the table, replace the DEBT variable with the following variables from the ‘DEBTS’ variable list and name the ‘HDEBT’ variable something comparable:

|  |  |
| --- | --- |
| Table 3 Label | SDA Variable |
| Primary residence | MRTHEL |
| Other (residential property) | RESDBT |
| Lines of credit not secured by residential property | OTHLOC |
| Education Loans | EDN\_INST |
| Vehicle Loans | VEH\_INST |
| Other Installment Loans | OTH\_INST |
| Credit Card Balances | CCBAL |
| Other | ODEBT |

It is easy to modify the SDA table further, if desired. For example, if one would like to see one of these assets split up by the family structure of the household, one would insert ‘FAMSTRUCT’ into the Column variable.

Furthermore, if one wished to examine more survey years, or strictly historical years, one could adjust the filter variable. For example, to create a table of only the 1992 survey data, the text in the parentheses after ‘YEAR’ in the ‘Selection Filter(s):’ text box should be ‘1992’ without the quotation marks.

# **Table 5**

In order to create the first part of bulletin table 5, please follow these instructions:

Leverage Ratio Aggregate

1. Click the ‘Analysis’ button in the top left corner
2. Click the ‘Means’ tab
3. Click on the triangle next to the folder next to the word ‘ASSETS’ in the bottom left panel of the screen
4. Click on ‘ASSET’ in the list of variables that has appeared beneath the ‘ASSETS’ folder
5. In the upper left portion of the screen, ‘ASSET’ now appears in the text box after ‘Selected:’
6. Push the ‘Dep’ button underneath the text box. This copies the variable name into the Dependent text box to the right
7. Go back to the bottom left panel, to the variable folders. Click the ‘DEBT’ variable name under the ‘DEBTS’ folder
8. Change the ‘Mode’ setting above the variable lists to ‘Append’ by pushing the radio button
9. Click the ‘Dep’ button so that ‘DEBT’ is appended to the text in the ‘Dependent:’ text box
10. Go back to the bottom left panel, to the variable folders. Click the ‘YEAR’ variable name under the ‘TECHNICAL’ folder
11. Go up to the Upper left portion of the screen and push the ‘Row’ button beneath the ‘Selected:’ text box. This copies the variable name into the Row text box to the right
12. Now, press the ‘Filter’ button beneath the ‘Selected:’ text box. This copies the variable name into the Selection Filter text box to the right
13. In the filter text box, insert the following text in between the parentheses that appeared after the word ‘YEAR’ with no period: 2004-2016. This will limit the data to only those years.
14. Change the ‘Main Statistic to display’ to ‘Totals (numerator of mean)’
15. Click the ‘Run the Table’ button in the bottom
16. This generates the sums of ‘ASSET’ and ‘DEBT’. To calculate the aggregate leverage ratios in the table, take the sum of ‘DEBT’ and divide it by the sum of ‘ASSET’ and multiply by 100

Leverage Ratio Median for Debtors

1. Go to the ‘RATIOS’ directory in the bottom left part of the screen
2. Click the ‘LEVRATIO’ variable
3. Push the ‘Dep’ button so that the only ‘Dependent:’ variable is ‘LEVRATIO’
4. Go back to the bottom left panel, to the variable folders. In the ‘DEBT’ folder, click on the ‘HDEBT’ variable
5. Go up to the Upper left portion of the screen, make sure that the ‘Append’ radio button is selected under ‘Mode’, then push the ‘Filter’ button beneath the ‘Selected:’ text box. This copies the variable name into the Filter text box to the right, beside the Year filter already present
6. In the parentheses beside HDEBT, enter the text ‘1’ without quotes
7. Make sure the ‘Main Statistic to display’ to ‘Means’
8. Click the ‘Output Options’ dropdown men and make sure the checkbox next to Medians is checked
9. Click the ‘Run the Table’ button in the bottom

Fraction with Payment to Income Ratio Greater than 40%

1. Remove the ‘HDEBT(1)’ text from the filter box
2. Select PIR40 from the ‘RATIOS’ folder
3. Push the ‘Dep’ button. Make sure that ‘PIR40’ is the only text in the ‘Dependent’ text box
4. Make sure that ‘Means’ are selected in the ‘Main Statistic to display:’ box
5. Uncheck the ‘Median’ checkbox
6. Push the ‘Run the Table’ button

In order to create the remaining parts of the table, replace the Dependent variable with the following variables and follow the additional instructions:

|  |  |  |
| --- | --- | --- |
| Table 5 Label | SDA Variable Name | Additional Instructions |
| Debt to Income Ratio Aggregate | DEBT, INCOME | 100\*SUM(DEBT)/SUM(INCOME) |
| Debt to Income Ratio Median | DEBT2INC |  |
| Payment to Income Ratio Aggregate | TPAY, INCOME | 12\*100\*SUM(TPAY)/SUM(INCOME) |
| Payment to Income Ratio Median | PIRTOTAL |  |
| Turned down for Credit | TURNDOWN | Follow Steps 28-33 |
| Did not apply out of fear | FEARDENIAL | Follow Steps 28-33 |
| Turned down or did not apply out of fear | TURNFEAR | Follow Steps 28-33 |
| Late on Payments | LATE | Follow Steps 28-33 |
| Late on Payments 60 days or more | LATE60 | Follow Steps 28-33 |
| Payday loan | HPAYDAY | Follow Steps 28-33 |
| Declared bankruptcy in the past 5 years | BNKRUPTLAST5 | Follow Steps 28-33 |
| Use credit cards for convenience only | NOCCBAL | Follow Steps 28-33 |

Furthermore, if one wished to examine more survey years, or strictly historical years, one could adjust the filter variable. For example, to create a table of only the 1992 survey data, the text in the parentheses after ‘YEAR’ in the ‘Selection Filter(s):’ text box should be ‘1992’ without the quotation marks.