**LAB 3: DESCRIPTIVE STATISTICS**

*Thursday sections: due 5:00 PM Wednesday*

*Friday sections: due 5:00 PM Thursday*

Background Info

Methodological Report: <https://ippsr.msu.edu/sites/default/files/SOSS55_meth.pdf>

Variables of interest for problem set: *ret1a, ret1b, ret1c, ret6, ret5a, ret3*. Familiarize yourself with the questions associated with these variables, their level of measurement, and the codes for valid responses (like yes or no) vs. invalid (responses that wouldn’t be included in descriptive statistics: “I don’t know” “Refuse to answer”).

You will type your answers directly into this Word document. Submit this Word document and your Excel workbook on Canvas to show your work and formulas used. (See these videos if you want a refresher on [pivot tables / frequency distributions](https://www.youtube.com/watch?v=IJTNX3eV7mw) in Excel.)

Assignment

1. For each of the following 5 bolded variables:
   1. Describe what the variable measures
   2. Provide a list of its *valid* values + codes
   3. Provide a list of its *invalid* values + codes
   4. Identify the measurement level for the following variables: *(if categorical, is it nominal or ordinal? if interval-ratio, is it continuous or discrete?)*

**Ret1a**

1. Whether the individual personally regularly puts money away, saves, or invests in a formal retirement plan such as 401K, 403B or an IRA / if they did prior to their retirement
2. <1> Yes, <2> No
3. <8> Do not know, <9> Refused this question
4. Categorical nominal

**Ret1b**

1. Whether the individual personally regularly puts money away, saves, or invests in a regular savings account for use in an emergency / if they did prior to their retirement
2. <1> Yes, <2> No
3. <8> Do not know, <9> Refused this question
4. Categorical nominal

**Ret1c**

1. Whether the individual personally regularly puts money away, saves, or invests in stocks, bonds or mutual funds outside of a formal retirement plan / if they did prior to their retirement
2. <1> Yes, <2> No
3. <8> Do not know, <9> Refused this question
4. Categorical nominal

**Ret6** – *for this assignment, please consider Ret6 = 88 to be invalid.*

1. The age the individual expects to retire / the age they did retire
2. <18-80> Age in years
3. <8> Do not know, <9> Refused this question, <88> No plans to ever retire
4. Ratio discrete

**Ret5a**

1. Whether the individual considers or considered their long term investment and financial plans for their retirement as thought out to not having/having had any plans in place
2. <1> Very well thought out, <2> Somewhat thought out, <3> Not too well thought out, <4> No plans in place
3. <8> Do not know, <9> Refused this question
4. Categorical Ordinal
5. On separate sheets, create a separate frequency distribution for each of the categorical variables out of the list of 5 variables above, using pivot tables in Excel.
   1. Rename your sheets with the variable name.
   2. Delete invalid values first so that your answers are only based on real answers.
   3. Show frequencies (count), percentages, and totals.
   4. Rename column headers so that they are useful
   5. Change codes to values (for ex., 1s and 2s to “yes” and “no”) so that they are easier to interpret
   6. Copy your tables below, into this Word doc.

| **Ret1a** | **Frequency** | **Relative Frequency** |  |
| --- | --- | --- | --- |
| Yes | 517 | 54.25% |  |
| No | 436 | 45.75% |  |
| **Grand Total** | **953** | **100.00%** |  |

| **Ret1b** | **Frequency** | **Relative Frequency** |
| --- | --- | --- |
| Yes | 555 | 57.75% |
| No | 406 | 42.25% |
| **Grand Total** | **961** | **100.00%** |

| **Ret1c** | **Frequency** | **Relative Frequency** |
| --- | --- | --- |
| Yes | 303 | 31.60% |
| No | 656 | 68.40% |
| **Grand Total** | **959** | **100.00%** |

| **Ret5a** | **Frequency** | **Relative Frequency** |
| --- | --- | --- |
| Very well thought out | 268 | 28.39% |
| Somewhat thought out | 368 | 38.98% |
| Not too well thought out | 105 | 11.12% |
| No plans in place | 203 | 21.50% |
| **Grand Total** | **944** | **100.00%** |

**Submit this Word Document and your Excel workbook to Canvas.**