

Compustat Data Cleaning

Federico Rodari

October 31, 2022

1.3 Compute Some Simple Series of Interest

(b) The perpetual inventory method (PIM) interpret an economy's capital stock as an inventory. The stock of inventory increases with capital formation (investments). Constructing a measure of capital with such method requires a time series of investment and a measure of the depreciation rate so that capital can be constructed recursively from the standard law of motion for capital accumulation. The measure we use here might differ from the PIM measure if we do observe that capital in the firm is increasing while having zero investment because of measurement issues.

(d) Constant Returns to Scale

(f) Cobb-Douglas production function and Constant Returns to Scale

The table of the main variables ($_w$ stands for winsorized) is the following (the negative values are driven by negative operating income values)

Table 1: Summary Statistics of Main Variables in the Data

Variable Name	Mean	St. Dev.
capital	409.510	3566.606
cashflowrate	-0.818	35.155
cashflowrate_w	0.033	6.218
emp	4.695	22.531
empgrowth	0.036	0.363
empgrowth_w	0.058	0.301
investment	72.051	638.241
irate	0.546	28.843
irate_w	0.258	0.200
oibdprate	-16.001	278.669
oibdprate_w	-0.736	94.497
output_cap_r	36.033	376.838
outputgrowth	0.091	0.539
outputgrowth_w	0.124	0.455
outputva	2152.304	40895.975
tfpr	7.832	2.785
tfprgrowth	-0.005	0.492
tfprgrowth_w	0.021	0.409

The distribution of the winsorized variables looks like the following

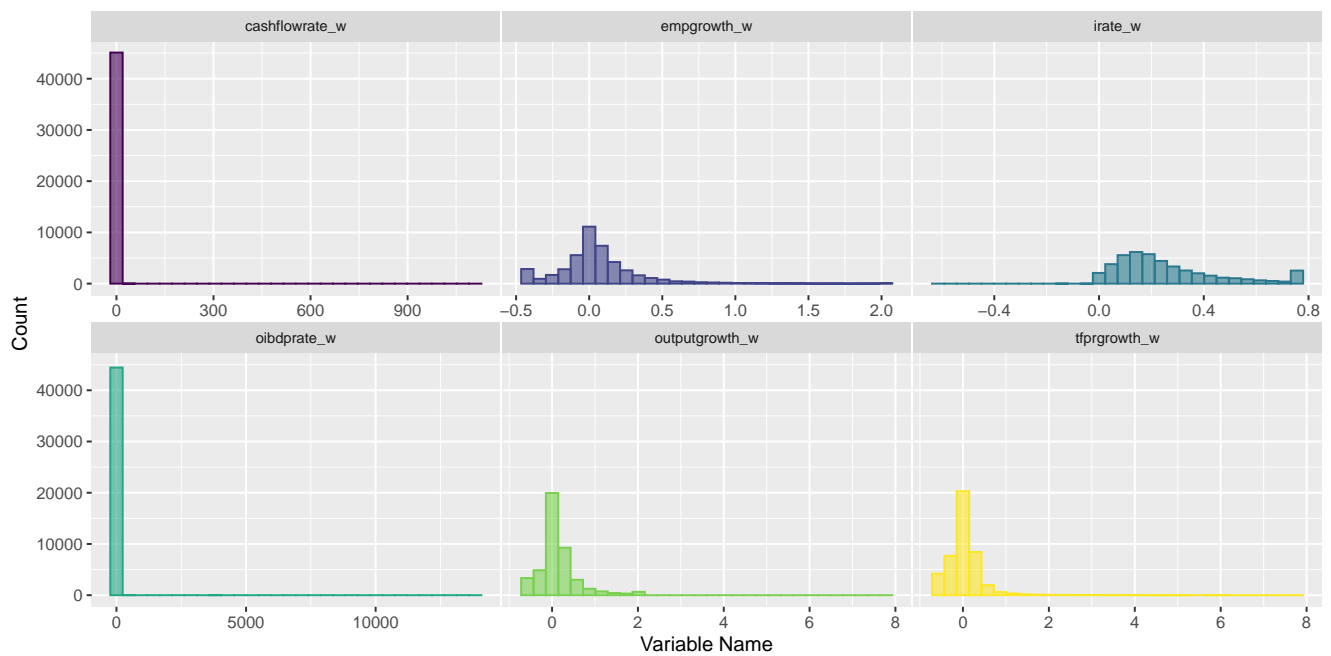


Figure 1: Distribution of winsorized variables

We can see that two variables still suffer from extreme outliers, as the distribution looks concentrated mostly on the left with some very rare and extreme values