

README FILE FOR

Credit Reallocation, Deleveraging, and Financial Crises

This document provides details on tables and figures for the above article. The ASCII document File1 provides detailed data from which the numbers in Table 1, Panels A and B, can be derived. In particular, it reports detailed annual values for the POS and NEG credit flows, as defined in Section 4 of the Paper. Detailed annual values are provided for total credit, allowing to compute the whole columns 1-5 of Panel A; for loans, allowing to compute the whole columns 6-10 of Panel A; and for bonds, allowing to compute the whole columns 11-15 of Panel A. Besides standard formulas for computing the means, the formulas needed for computing the figures for SUM, NET and EXC for the various periods and subperiods using the POS and NEG are as follows (see also Section 4):

$$(1) \text{ SUM}_{st} = \text{POS}_{st} + \text{NEG}_{st}$$

$$(2) \text{ NET}_{st} = \text{POS}_{st} - \text{NEG}_{st}$$

$$(3) \text{ EXC}_{st} = \text{SUM}_{st} - |\text{NET}_{st}|$$

[Similarly, the ASCII file File1 provides detailed annual values for the POSbig and NEGbig credit flows, from which all the columns in Panel B can be derived, using the same procedure and formulas as detailed above]. Note also that the numbers in the ASCII file File1 also allow to plot the figures of the paper (except Figure 4, for which the relevant file is detailed below).

Using the annual values for the POS and NEG credit flows in the ASCII File1, one can also compute all the figures in Table 3, using standard formulas for standard deviation and for coefficient of variation ((standard deviation/mean)*100).

Using the numbers in the ASCII files File1 and File12, including the values for GDP, one can compute all the formulas for correlations in Table 4, Panel A.

The ASCII documents File2, File3, File4, File5, File6, File7, File8, File9, File10, provide detailed data from which the numbers in Table 2 can be derived. In particular, they report detailed annual values for the POS and NEG credit flows, as defined in Section 4 of the Paper, by size quintiles, industries, regions, return to assets quintiles, return to equity quintiles, profits to capital quintiles, sales to capital quintiles. For size quintiles, detailed annual values are provided for total credit, allowing to compute the whole columns 1-5 of Panel A of Table 2, for loans, allowing to compute the whole columns 6-10 of Panel A of Table 2, and for bonds, allowing to compute the whole columns 11-15 of Panel A of Table 2. Besides standard formulas for computing the means, the formulas needed for computing the figures for SUM, NET and EXC for the various periods and subperiods using the POS and NEG are as in (1)-(3) above. Further, the formula for computing the W-indices of Panel B of Table 2 using the flows in the ASCII file is given by (7) in the paper.

The ASCII document File11 provides detailed data for SUM and EXC calculated with idiosyncratic effects (where sectors are manufacturing industries, size quintiles, profits to capital quintiles, chaebol affiliation).

From these, applying the formula below, one obtains the variance decomposition in Panel B of Table 3:

$$\text{var}(\text{SUM}_t) = \text{var}(\text{SUM}_t^i) + \text{var}(\text{SUM}_t - \text{SUM}_t^i) + 2\text{cov}(\text{SUM}_t - \text{SUM}_t^i, \text{SUM}_t^i)$$

In Table 4, the decomposition of correlation in Panel A can be obtained using again the data in File1 and File4 and the following formula:

$$\text{corr}(\text{SUM}, \text{GDP}) = ((\text{sd}(\text{EXC})) / (\text{sd}(\text{SUM}))) * \text{corr}(\text{EXC}, \text{GDP}) + ((\text{sd}(|\text{NET}|)) / (\text{sd}(\text{SUM}))) * \text{corr}(|\text{NET}|, \text{GDP})$$

The correlations by size quintiles in Table 4, Panel B, can be obtained using the data in File2 and in File12, as well as standard formulas for correlations.

The ASCII document File13 provides data for the regressions of Table 5.

The ASCII documents File14, File15, and File16 provide detailed data for computing the index in (10), using operating profits and sales. One can then compute the figures in Table 6, for all firms, for chaebol and non-chaebol firms, and by size quintiles. The data in File14, File15, and File16 can also be used to generate Figure 4.