**1 Decile Regressions**

Text in the published paper:

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| Total FDI for year *t* is then regressed on the **total number** of passengers flying into a country year *t-1* (transformed by ln (1 + number) due to the magnitude of passengers) and split into 10 deciles to investigate the effects at different passenger levels and, in effect, country size and level of economic development. This is our simplest regression, and the reopening coefficient was significant at all deciles except for the first (Table 1, Model 1), showing that with the base relationship, the relationship between passengers flying into a country on US carriers and FDI in that country grows stronger as there are more passengers flying in. While still not causal, that FDI increases with the passenger numbers associated with airport reopening is suggestive that the effect is likely to be more important in relatively large, developed economies.  Total FDI (Y) is next regressed on the **percentage change** in passengers flying into the country (X, transformed by ln (X+1) due to the magnitude of many changes), again binned by decile to investigate the effects at different X levels. Taking logarithms produces undefined values from negative values; we therefore restrict the data set, effectively narrowing the interval of study of the passenger numbers’ variable to just positive changes. As we are examining deciles, this restriction effectively means that we omit what would be the lowest deciles of the unrestricted passenger growth (X) variable, simply “zooming in” our analysis to the higher deciles. Significant and positive changes were observed for the middle 20-90% of the X variable (Table 1, Model 2), implying that the relationship between an increase in passengers flying into the country and total FDI **becomes more positive** with the magnitude of the percentage increase.  **Table 1**  **Decile OLS regressions of total FDI on quantity or percentage increase of passengers flying into a country, controlled by battle fatalities and GDP**   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | tau | X1 = ln\_pass | coefficients1 | X1 = ln\_passengers\_pct | coefficients2 | coefficients3 | coefficients4 | | 0.1 | Intercept | 31020000\*\*\* | Intercept | 36910000\*\*\* | 40870000\*\*\* | -113800000 | | 0.1 | Coefficient | -2184000 | Coefficient | -7617000 | -7935000 | -231200000 | | 0.2 | Intercept | 93940000\*\*\* | Intercept | 142500000\*\*\* | 143200000\*\*\* | -18840000 | | 0.2 | Coefficient | 29790000\*\*\* | Coefficient | 83980000 | 83720000 | -19250000 | | 0.3 | Intercept | 241600000\*\*\* | Intercept | 307200000\*\*\* | 305200000\*\*\* | 36880000\* | | 0.3 | Coefficient | 71060000\*\*\* | Coefficient | 299900000\*\*\* | 299700000\*\*\* | 18480000 | | 0.4 | Intercept | 357500000\*\*\* | Intercept | 458500000\*\*\* | 472800000\*\*\* | 96630000\* | | 0.4 | Coefficient | 179800000\*\*\* | Coefficient | 507600000\*\*\* | 501500000\*\*\* | 70090000 | | 0.5 | Intercept | 477600000\*\*\* | Intercept | 815500000\*\*\* | 9.18e+08\*\*\* | 167100000\*\*\* | | 0.5 | Coefficient | 339500000\*\*\* | Coefficient | 951800000\*\*\* | 920500000\*\*\* | 205700000\*\*\* | | 0.6 | Intercept | 716900000\*\*\* | Intercept | 1.229e+09\*\*\* | 1.357e+09\*\*\* | 223100000\*\* | | 0.6 | Coefficient | 615800000\*\*\* | Coefficient | 1.576e+09\*\*\* | 1.572e+09\*\*\* | 257200000\*\*\* | | 0.7 | Intercept | 1.111e+09\*\*\* | Intercept | 1.843e+09\*\*\* | 2.059e+09\*\*\* | 504500000\*\*\* | | 0.7 | Coefficient | 1.185e+09\*\*\* | Coefficient | 3.503e+09\*\*\* | 3.51e+09\*\*\* | 269700000\*\*\* | | 0.8 | Intercept | 1.691e+09\*\*\* | Intercept | 3.595e+09\*\*\* | 4.541e+09\*\*\* | 9.67e+08\*\*\* | | 0.8 | Coefficient | 2.194e+09\*\*\* | Coefficient | 6.586e+09\*\*\* | 6.488e+09\*\*\* | 366800000\* | | 0.9 | Intercept | 3.324e+09\*\*\* | Intercept | 1.758e+10\*\*\* | 2.114e+10\*\*\* | 2.144e+09\*\*\* | | 0.9 | Coefficient | 4.452e+09\*\*\* | Coefficient | 1.435e+10\*\*\* | 1.512e+10\*\*\* | 1.116e+09\* | | 1 | Intercept | 1.457e+11\*\*\* | Intercept | 2.611e+11\*\*\* | 3.28E+11 | 6.85e+10\*\*\* | | 1 | Coefficient | 1.64E+10 | Coefficient | 4.90E+10 | 3.14E+09 | 3.417e+10. | | *\* The passengers variable, or X1, is defined as the natural log of passengers flying into the country (ln\_pass) or percentage change in passengers flying into the country from the previous year (ln\_passengers\_pct), adding +1 before the log to account for entries of 0, which would otherwise produce an undefined result. This is split by decile in the “tau” column.*  *Note that negative values are not expressed due to the log transformation producing -Inf values. As we are examining deciles, this restriction effectively means that we are omitting what would be the lowest deciles of the unrestricted passenger growth (X) variable, simply “zooming in” our analysis to the higher deciles.*  *Significance: \*\*\* p<0.001; \*\* p<0.01; \* p<0.05; . p<0.1*  *1 This regression estimates the following relationship: Total FDI = β1\*ln\_pass + ε*  *2 This regression estimates the following relationship: Total FDI = β1\*ln\_passengers\_pct + ε*  *3 This regression estimates the following relationship: Total FDI = β1\*ln\_pass + β2\*ln\_battle\_fatalities + ε*  *β2 (not reported) is the coefficient on X2, ln\_battle\_fatalities (the natural log+1 of battle fatalities).*  *4 This regression estimates the following relationship: Total FDI = β1\*ln\_pass + β2\*ln\_battle\_fatalities + β3\*total\_GDP + ε*  *β3 (also not reported) is the coefficient on X3, total\_GDP (in terms of current $US).* | | | | | | |   This relationship between the lagged logarithm of passenger levels and current FDI holds even when controlling for the natural logarithm of battle fatalities (drawn from ACLED data from that same year and country) (Table 1, Model 3), though is again only significant for the middle 20-90% of the X1 (log of increase in passengers) variable.  Finally, the relationship holds even when controlling for GDP in terms of current (2022) USD, though it is only significant for the latter 40-100% deciles of the X1 (log of increase in passengers) variable (Table 1, Model 4). Please note the spike in the beta at the end, which is significant for the passengers’ variable. In sum, there is a clear link between passenger numbers or growth and FDI, even controlling for conflict intensity and GDP. However, since airlines have an incentive to increase flights to countries with surging economies (and hence greater FDI), we observe correlation rather than causation. |

Replication notes: