Assessing FDI Impact: Input-Output Methodology

1. Leontief input-output (I-O) multipliers
   1. Computable general equilibrium (CGE) models of regional economy to produce indirect effects: IMPLAN (no Ukraine); SAM model
      1. “Key assumptions include: individuals participating in the economy are rational price-takers; markets are complete, and complete information about the market is available to everyone; there are no externalities; and market characteristics (e.g., preferences and technology) do not change rapidly over time (Van Daal & Jolink, 1993)” [x](https://rem-main.rem.sfu.ca/papers/gunton/sshrc_cea_Report_Final_March_31_2020.pdf)
   2. Initial (direct) effect → multiplier effect
2. How to calculate spending impacts [x](https://quincycollege.edu/wp-content/uploads/EMSI_Methodology.pdf)
   1. Initial income effect (payroll of employees)
   2. Initial sales effect
      1. Income distributed using average household spending patterns
      2. Non-pay institutional spending distributed across detailed industries (using SAM model)
   3. Net out non-effects
      1. Workers/people who would have been there anyway?
   4. Regional purchasing coefficients used to estimate amount of spending occurring within the region
      1. Run through SAM model’s multiplier matrix
   5. Subtract “alternative use of funds” from gross spending impact
      1. Opportunity cost of money that just returns back into the hands of local sources (otherwise leads to huge overestimation — assuming that the money would just sit there otherwise)
   6. Sum multiplier effects together with initial effect = total added income
3. Sources
   1. Duke Athletics study
   2. [source 2](https://quincycollege.edu/wp-content/uploads/EMSI_Methodology.pdf)
   3. [source 3](https://rem-main.rem.sfu.ca/papers/gunton/sshrc_cea_Report_Final_March_31_2020.pdf)
   4. [source 4](https://support.implan.com/hc/en-us/articles/360038285254-How-IMPLAN-Works)
   5. [IMPLAN not available for Ukraine](https://support.implan.com/hc/en-us/articles/18728632236571-IMPLAN-International-Data)