In this case, notice that the equation could be estimated relying on a linear form. To preserve comparability of the results, we keep the same non-linear estimation method in both cases. Under Model (B), transport costs are decomposed in the two additive and ad-valorem dimensions (Equation (**??**)). From this, we compare the fitting properties and the explanatory power of both models to evaluate the importance of modeling the additive component.[1]

After estimating Equation (**??**), we can rebuild a measure of each component, $\widehat{\tau}^{adv}_{is(k)} = \widehat{\tau}_i \times \widehat{\tau}_{s(k)}$ for the ad-valorem cost and $\widehat{t}_{is(k)} = \widehat{t}_i + \widehat{t}_{s(k)}$ for the additive cost, that are country-sector specific, by year and transport mode. When assuming ad-valorem costs only (Equation (**??**)), we proceed similarly to get $\widehat{\tau}^{ice}_{is(k)} = \widehat{\tau}_i \times \widehat{\tau}_{s(k)}$. As **?**, we take the average over the country-sector dimension, using the values of each trade flow (is-specific) over total yearly trade as a weighting scheme. We thus recover a "synthetic estimate" of each type of transport cost: $\widehat{\tau}^{ice}$ for Model (A), $\widehat{\tau}^{adv}$ and $\widehat{t}$ for Model (B), for each year and transportation mode. These results are reported in Section **??**.

[1]One may object that a comprehensive study of the structure of transport costs should also include the third model with only additive costs. This has driven us to estimate this third model (C) as well, in which case the estimated equation is written according to: $\ln\left(\frac{p_{ik}}{\widetilde{p}_{ik}} - 1\right) = \ln\left(\frac{t_i + t_{s(k)}}{\widetilde{p}_{ik}}\right) + \epsilon^{add}_{ik}$. The main result that emerges is that this model (C) is dominated (in terms of quality of fit properties) by the model (A) with multiplicative costs only, which is itself dominated by the complete model (B). More details of these results are given in the Online Appendix, Section A.