

### **Note regarding treatment of “outliers”**

Outliers for the purpose of this research are defined as observations with values that are more than two standard deviations (+/-) away from the mean value. In other words, we are covering at least 95% of all observations (in a normal distribution, an interval of mean value +/- two standard deviations covers 95% of all values). This approach allows us to eliminate excessively high values of the observed variable (we do not have excessively low values because all our variables are limited from below by zero value) and as such controls for extraordinary outcomes and respondents who answer without thinking.

In some cases, it is helpful to exclude outliers in order to compare "normal" outcomes. For example, if company registration usually takes from 30 to 90 days, but one individual, for whatever reason, took five years, that single observation would have a significant impact on the mean, even though it may be an aberration. It might also be the result of inaccurate memory or even a coding error (like typographical error).

In other cases, however, we may find that 3 - 4% of respondents really are suffering from severe delays. These events might be somewhat unusual, but if it is happening to more than one or two firms, and especially if it is happening to fairly large or prominent investors, then it often becomes well-known within the business community. Since many investors need to meet a certain time-table for their investment projects, the risk of long delays may deter such investment, as investors seek a location with a lower risk of delays.

In this regard, a country that succeed in lowering the incidence of lengthy delays, even if processing times remain the same for most investors, is making a significant improvement in their investment environment. FIAS therefore calculates most time and cost estimates both including and excluding "outliers", and presents the data that appear the most relevant and meaningful for analytical purposes.