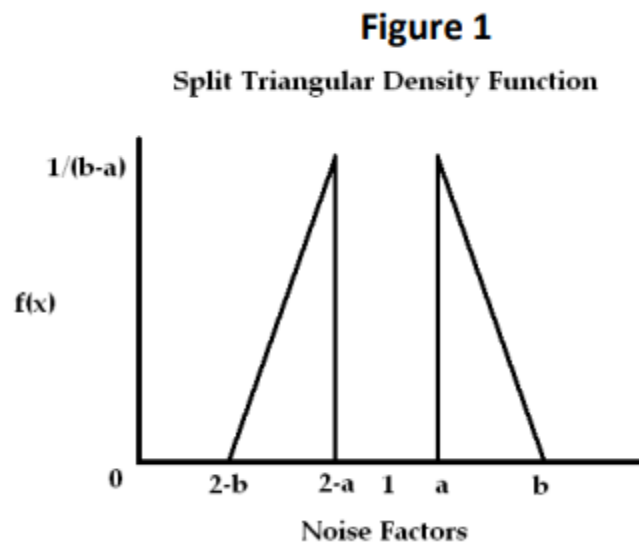


Frequently Asked Questions
QFR Disclosure Avoidance Methodology - Noise Injection
March 2024

Randomly generated multiplicative noise factors are applied to companies to perturb the tabulated estimates to provide disclosure avoidance protection. The same noise factor is applied to all financial items within a specific company and balanced on assets the fourth quarter of each year. The direction of the factors assigned to each company will be maintained during the first, second, and third quarters to mask the effects of the noise injection. Let $1 < a < b < 2$, then use the split triangular density function shown below to apply the noise.



Question 1: Can you tell me what values were used for a and b in the split triangular density function?

Answer: No, this is confidential information.

Question 2: Is the same noise factor assigned to a specific company from quarter to quarter?

Answer: No. While the noise factor is reassigned each quarter, the direction is maintained. This allows the time series trends to be maintained and not unduly influenced by a large change in direction of the factor.

The following example illustrates the noise factor assignment used in each quarter:

Publication Quarter (Prior Quarter Revisions)	Noise Factor Company A	Noise Factor Company B	
2024Q4(2024Q3-2023Q4)	1.1	0.9	Noise balanced on Assets, new factors assigned.
2025Q1(2024Q4-2024Q1)	1.3	0.8	Factors reassigned, same direction and new magnitude
2025Q2(2025Q1-2024Q2)	1.2	0.95	Factors reassigned, same direction and new magnitude
2025Q3(2025Q2-2024Q3)	1	0.9	Factors reassigned, same direction and new magnitude
2025Q4(2025Q3-2024Q4)	0.9	1.1	Noise balanced on Assets, new factors assigned.

- *Note that the new factor assigned in the 4th Quarter may be the same direction as the previous year but is not guaranteed.*

Question 3: Are the values we get for a certain data item for an entire industry the simple sum of the values of that item for each asset class to which noise has been applied?

Answer: Yes.

Question 4: Will the noise factors be balanced to minimize distortion at a certain level ?

Answer: The noise factors will be assigned to balance/minimize distortion using total Assets within each industry cell during the 4th quarter. This coincides with the introduction of the newly sampled companies.