

# GLIVENKO-CANTELLI THEOREM

*Risk and Asset Allocation* - Springer – *symmys.com*

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[www.symmys.com](http://www.symmys.com)

Formulas and figures in this presentation refer to the book **Risk and Asset Allocation**, Springer.

The notation, say, (5.24) refers to Formula 24 in Chapter 5 of the book

The notation, say, (T4.12) refers to Formula 12 in the Technical Appendices for Chapter 4, which can be downloaded from [www.symmys.com](http://www.symmys.com)

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$$\lim_{T \rightarrow \infty} F_{i_T}(x) = F_X(x) \quad (4.34)$$

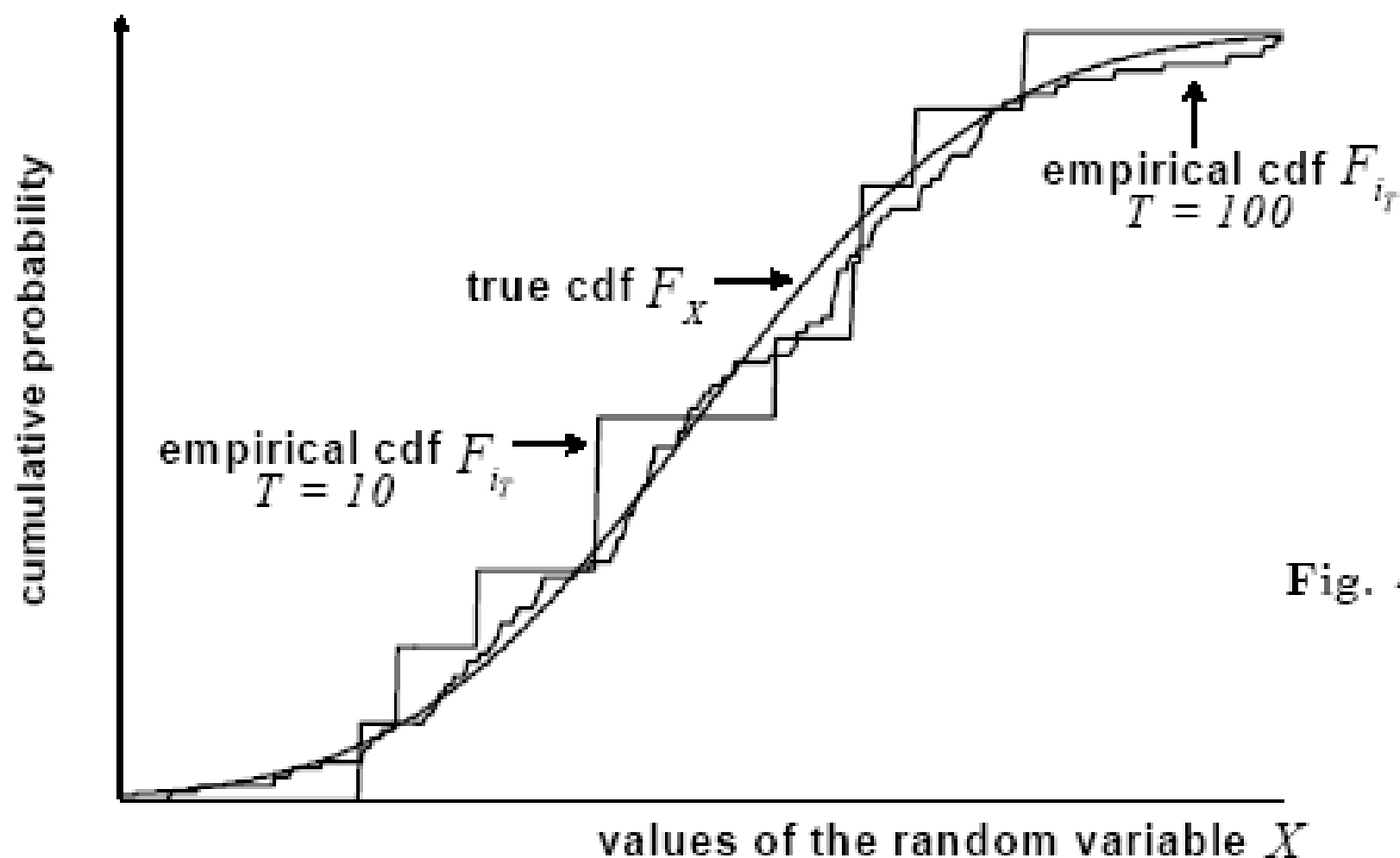


Fig. 4.5

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$$(T1.42) \quad f_{i_T} \equiv \frac{1}{T} \sum_{t=1}^T \delta^{(x_t)} \xrightarrow{T \rightarrow \infty} f_X$$



$$\#_i^\Delta \equiv T \int_{x_i - \frac{\Delta}{2}}^{x_i + \frac{\Delta}{2}} f_{i_T}(y) dy \xrightarrow[T \rightarrow \infty]{\Delta \rightarrow 0} f_X(x_i) T \Delta. \quad (T1.43)$$

