REPRESENTATIONS OF DISTRIBUTIONS

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

Attilio Meucci

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

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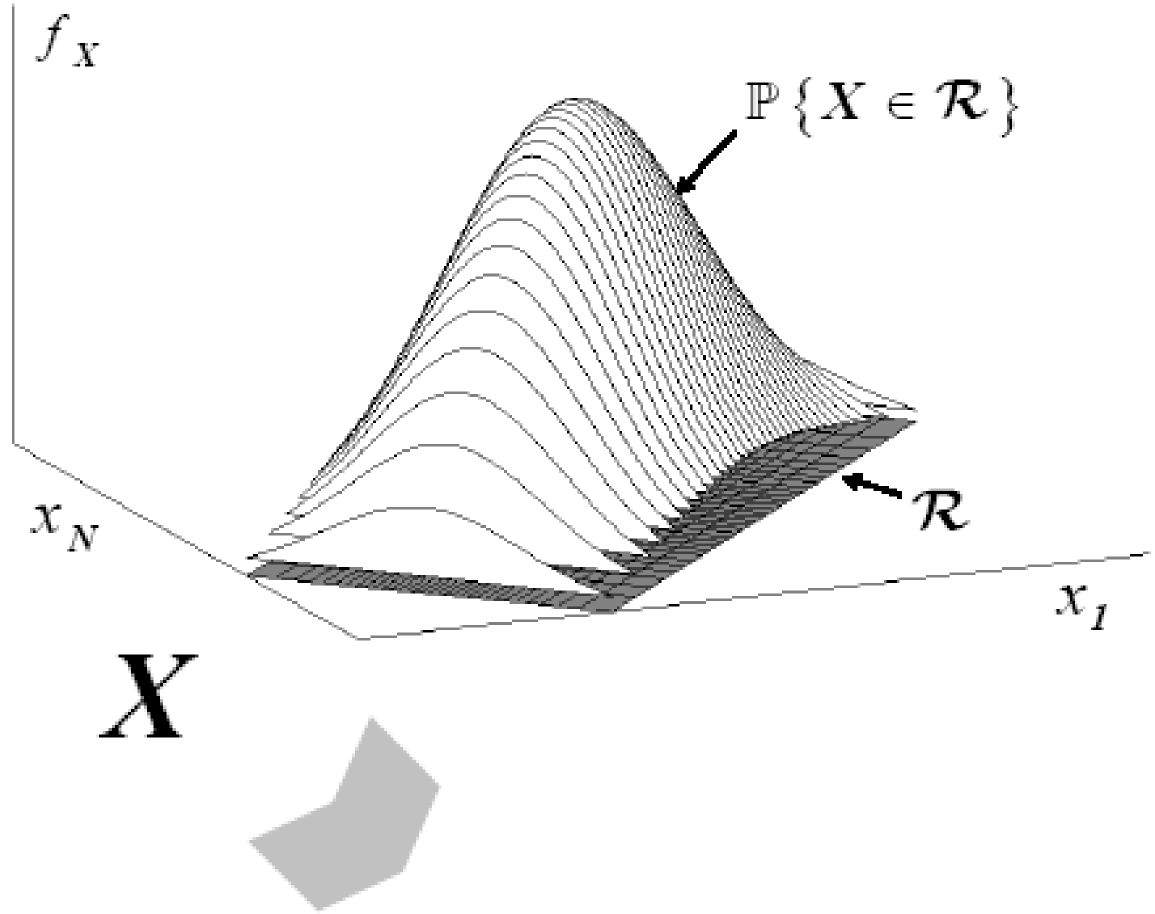

probability density function f_X

$$\boxed{\mathbb{P}\{\mathbf{X} \in \mathcal{R}\} \equiv \int_{\mathcal{R}} f_{\mathbf{X}}(\mathbf{x})\, d\mathbf{x}.} \quad (2.4)$$

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$$\boxed{F_{\mathbf{X}}(\mathbf{x}) \equiv \mathbb{P}\{\mathbf{X} \leq \mathbf{x}\} = \int_{-\infty}^{x_1} \cdots \int_{-\infty}^{x_N} f_{\mathbf{X}}(u_1, \ldots, u_N)\, du_1 \cdots du_N} \quad (2.9)$$

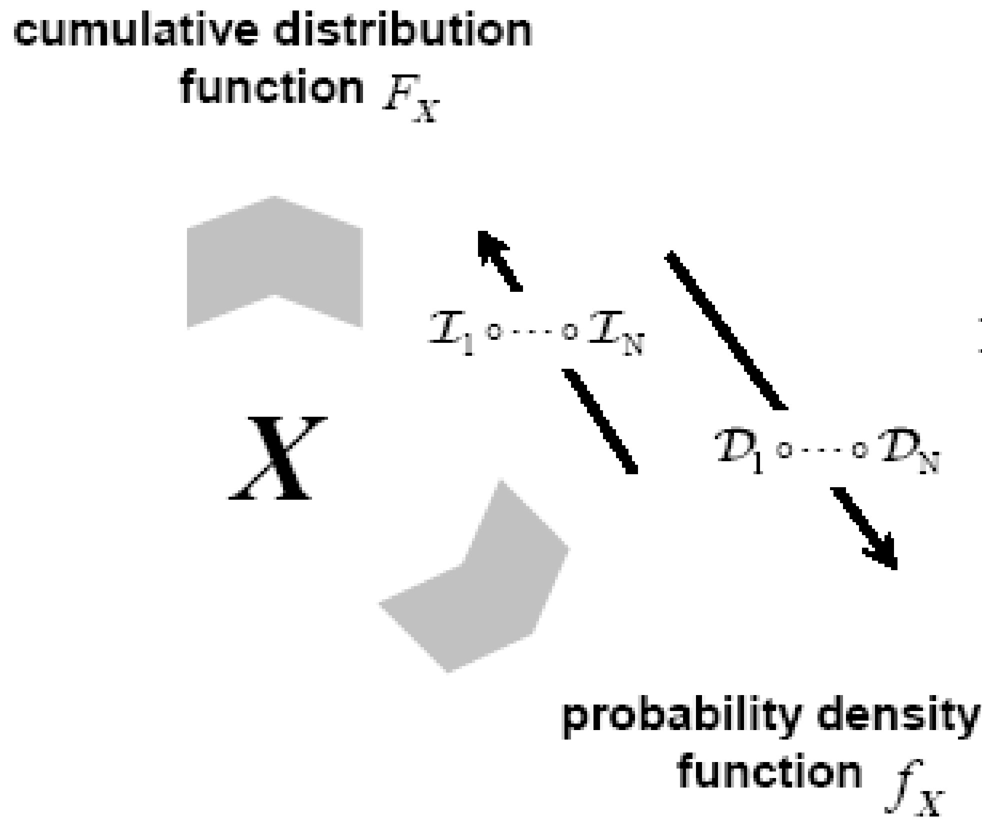

Fig. 2.2.

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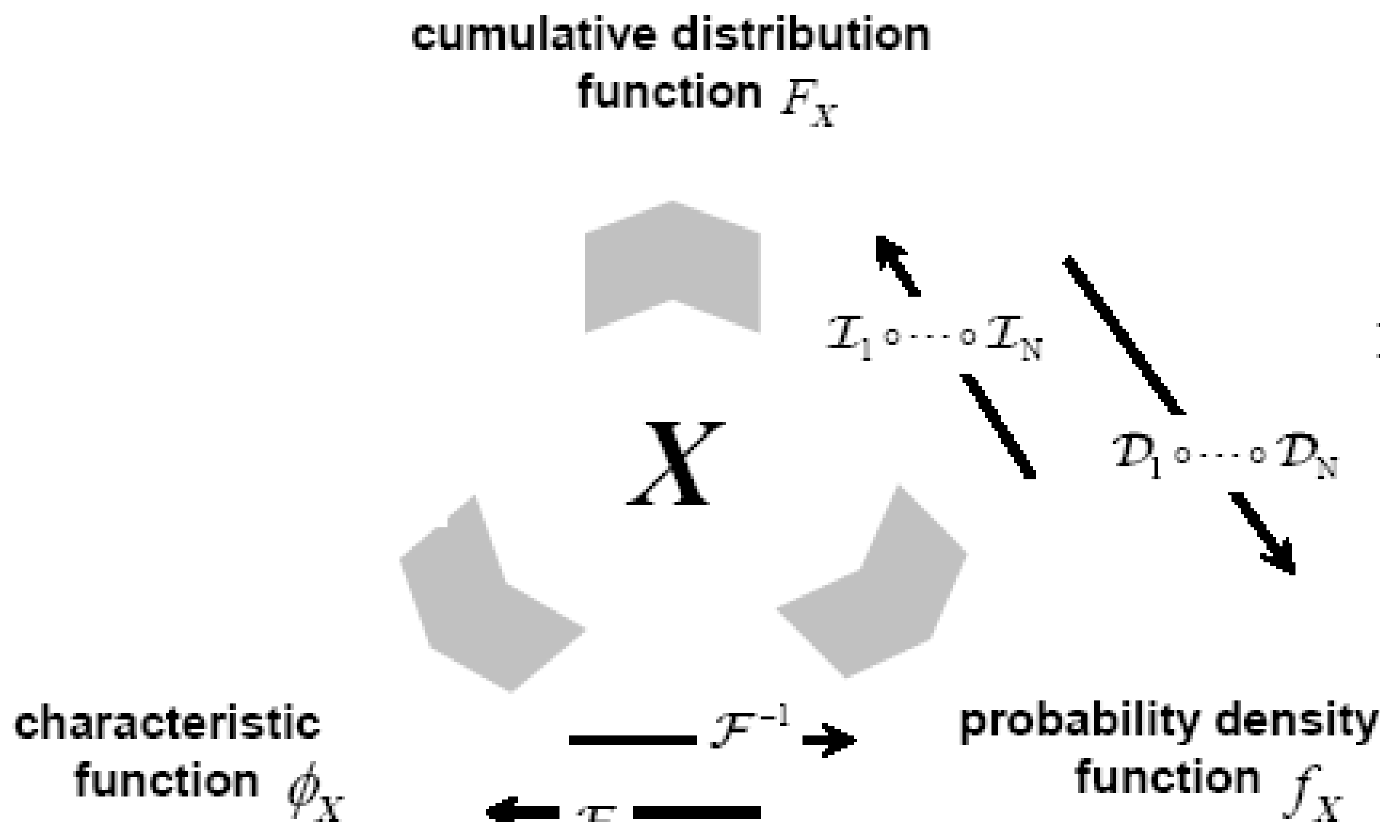

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$$\boxed{\phi_{\mathbf{X}}(\boldsymbol{\omega}) \equiv \mathrm{E}\left\{e^{i\boldsymbol{\omega}'\mathbf{X}}\right\}} \quad (2.13)$$

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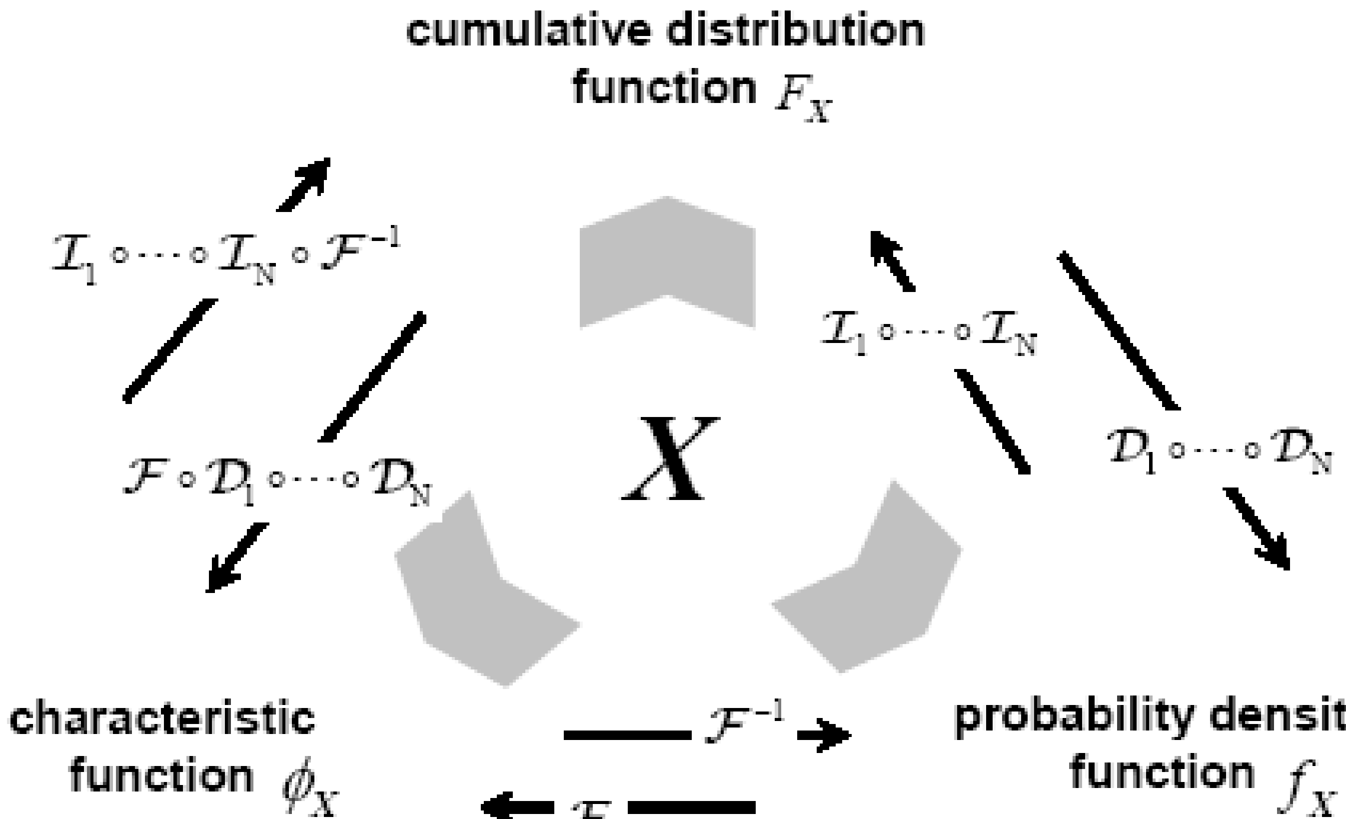

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