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**Chisini means and rational decision making:
Equivalence of investment criteria**

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Abstract. A plethora of tools are used for investment decisions and performance measurement, including Net Present Value (NPV), Internal Rate of Return (IRR), Profitability Index (PI), Modified Internal Rate of Return (MIRR), Average Accounting Rate of Return (AARR). All these and other known metrics are generally considered non-equivalent and some of them are regarded as unreliable or even naive. Building upon Magni (2010a, 2013)'s Average Internal Rate of Return (AIRR), we show that the notion of *Chisini mean* enables these tools to be used as rational decision criteria. Specifically, we focus on 11 metrics and show that, if properly used, they all provide equivalent accept-reject decisions and equivalent project rankings. Therefore, the intuitive notion of mean is the founding basis of investment decision criteria.

Keywords. Value creation, equivalence class, accept-reject decisions, project ranking, Net Present Value, Average Internal Rate of Return.

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