

## **Monetary De-measurement of taxation using cogni-economic pressure coefficient on a continuous progressivity model: towards equitable taxation for Kenya**

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Taxation by governments derives from subjects earnings measured in monetary terms a principle anchored in financial accounting. The canon of equity, sometimes referred to as ability to pay remains monetary. However, equal taxable incomes often require employment of different economic rationality levels to earn them depending on the profession or sector the tax payer comes from. This means that different cognitive energies are required to generate the same taxable income disapproving the mere "ability to pay paradigm as the most equitable. Using the Gamma Rationality measure for the credit unions sector that comprises 67% of Kenyan economic livelihoods, a Cogni-economic Pressure Coefficient is derived, which is used to generate a more equitable tax structure from a continuous progressivity tax model, for greater equity. A continuous progressivity model avails Newtonian differentiability thereby revealing the income structure of the working population. Possibility of the envisioned tax yield being greater than the raw money-measured tax yield is also shown. Nevertheless, greater taxation equity is considered superior to the tax yield.

**Keywords:** Cogni-economic Pressure Coefficient; Garn-Ina rationality measure; Psycho-social economic equation; Entrepreneurial rationality threshold; Income consumption rationality function