Emptiness Existence: A Free-Strategic view

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Abstract We formulate a theorem on the emptiness existence followed by its matematicall proof, that takes as a base a single axiom named hipoteticity i.e. an element exists iff it has a structure.

Keywords Emptiness · Existence · Coalitions · Game Theory

A Clara Isabel who with her interest in some emptiness dilemma allowedme to take some as always pleasant knowledge path, showing me the importance of the essential value of thrust. I would also like to thank the department of management and economic sciences of the Instituto Tecnolgico Nacional (Located in Celaya, Guanajuato, Mexico) with who I'm terribly indebted for allowing me the opportunity to drive courses on Financial Management and on The Firm's Culture thus enriching dimensional view away from thereal business cycles

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1 Existence

[AXIOM(Hipoteticity)] $\exists i \longleftrightarrow \mathscr{S}(i) \neq \emptyset$

An element exists if and only if it has structure.

Theorem 1 $\exists\emptyset$

The emptiness exists

Proof We generate an arbitrary set $N \neq \emptyset$. without loss of generality assume that its elements follow the next pattern

$$N = \{1, 2, 3, ..., j, j+1, ...\}$$

note that $|N| \leq \infty = n$, where $|N|$ denotes the number of elements of N as well known as the cardinality of such set.

We can write the power set of N

$$2^N = \{\{1\}, \{2\}, ..., \{1,2\}, ..., \{1,2,3\}, ..., \emptyset\}$$

with $\left|2^N\right| = 2^n$, and we can write the power set of 2^N

$$2^{2^N} = \{\{\{1\}, \{2\}, \emptyset\}, \emptyset, ..., \{\{1,2\}, \{1,2,3\}, \emptyset\}, ...\}$$

like this succesively until here deducing the structure of the emptiness given by its contention $\emptyset \in 2^N$;the $\{\emptyset, S_1\}$ with $S_1 \in 2^N \backslash \emptyset, \emptyset \in 2^{2^N}$;the $\{\emptyset, S_2\}$ with $S_2 \in 2^{2^N} \backslash \emptyset, \emptyset \in 2^{2^{2^N}}$;...

In general the set V_{i-1} that contains the emptinessequal t o

$$V_{i-1} = \emptyset \cup \{\emptyset, S_i\}_{S_i \in T_i \backslash \emptyset}$$

were $T_i = \begin{cases} 2^N & i = 1 \\ 2^{T_i - 1} & i > 1 \\ & \text{otherwise} \end{cases}$ $\mathscr{S}(\emptyset) = \{..., V_i, V_{i+1}, ...\}$ and $\exists\, \emptyset$ [1] **[Q.E.D.]**

References

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[1] The emptiness exists.