Zbl 075.04701
Erdős, Pál; Karamata, J.
Sur la majorabilité C des suites de nombres réels.
C- majorability of sequences of real numbers (In French)
Acad. Serbe Sci., Publ. Inst. Math. 10, 37-52 (1956).

A sequence $\{a_n\}$ of real numbers is said to be C-majorable if there is a sequence $\{A_n\}$ such that $a_n \leq A_n$ $(n = 1, 2, ...)$ and $(A_1 + \cdots + A_n)/n$ tends to a finite limit. In the first part of the paper various sets of necessary and sufficient conditions are established for a sequence to be C-majorable. Thus it is shown, for example, that $\{a_n\}$ is C-majorable if and only if, for every $k = o(n)$, $\sum_{r=n+1}^{n+k} a_r = o(n)$ and, for every $\varepsilon > 0$ and $m \geq (1 + \varepsilon)n$, $\limsup_{n,n\to\infty} \frac{1}{m-n} \sum_{r=n+1}^{n} a_r < \infty$. In the second part of the paper, certain Tauberian theorems and the prime number theorem are discussed in the light of the concept of C-majorability.

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Classification:
40A99 Convergence of infinite limiting processes