In brief: Knowledge grows – along with the number of publications
What are the trends in knowledge creation?
Gross expenses for research and development worldwide have risen enormously in the past. Studies show that this results in ever larger numbers of publications.

The number of scientific journals has risen exponentially during the last 100 years.

In economics alone, the number of publications listed in Web of Science has doubled between 2000 and 2017.
There are almost 8 million researchers in the world. They publish their findings to present themselves to their research community. Although the number of scientific journals rises steadily, they are unable to reproduce all this publication output. Scientists therefore compete fiercely for visibility and publication space. Every year, the number of scholarly papers increases by 8 per cent. Between 2008 and 2014, the number of papers published by authors from Africa grew by 60.1 per cent and those by authors from the Arab states by 109.6 per cent. China accounts for 20 per cent of all publications worldwide. Scientists depend on visibility in journals for their reputation. The flood of publications makes this more and more difficult and renders them invisible.

50 million publications are available worldwide. Which is relevant? Decide for yourself – in our online experiment: http://exa.zbw.eu/index.php

How is relevance defined in EconBiz?
Relevance is in the eye of the beholder. To students it can mean a textbook, to a researcher a recent working paper. Undeniably, a document must match the topic under discussion. Basically, the most important criterion for deciding this topical relevance is the frequency with which a search term appears (see TF-IDF).

Specific preferences of the searcher play an important part besides topical relevance. There may be a preference for more recent documents or (to a lesser degree) directly accessible and available documents.

The ZBW works continually to enrich the databasis with further relevance indicators, develops new multifaceted indicators and optimises the interaction of all factors to bring searchers and research findings together.

Numbers in Web of Science: Citations have been compiled since 1945 for natural sciences by Science Citation Index (SCI), since 1956 for the social sciences by Social Sciences Citation Index (SSCI), and since 1975 for the humanities by Arts and Humanities Citation Index (A&HCI). They are also available in print. Conference proceedings have been compiled since 1990 by Conference Proceedings Citation Index and books since 2005 by Book Citation Index. This possibly explains the jump between 1955 and 1956.
References:


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Photo: ZBW / Sven Wied
Graphics: ZBW