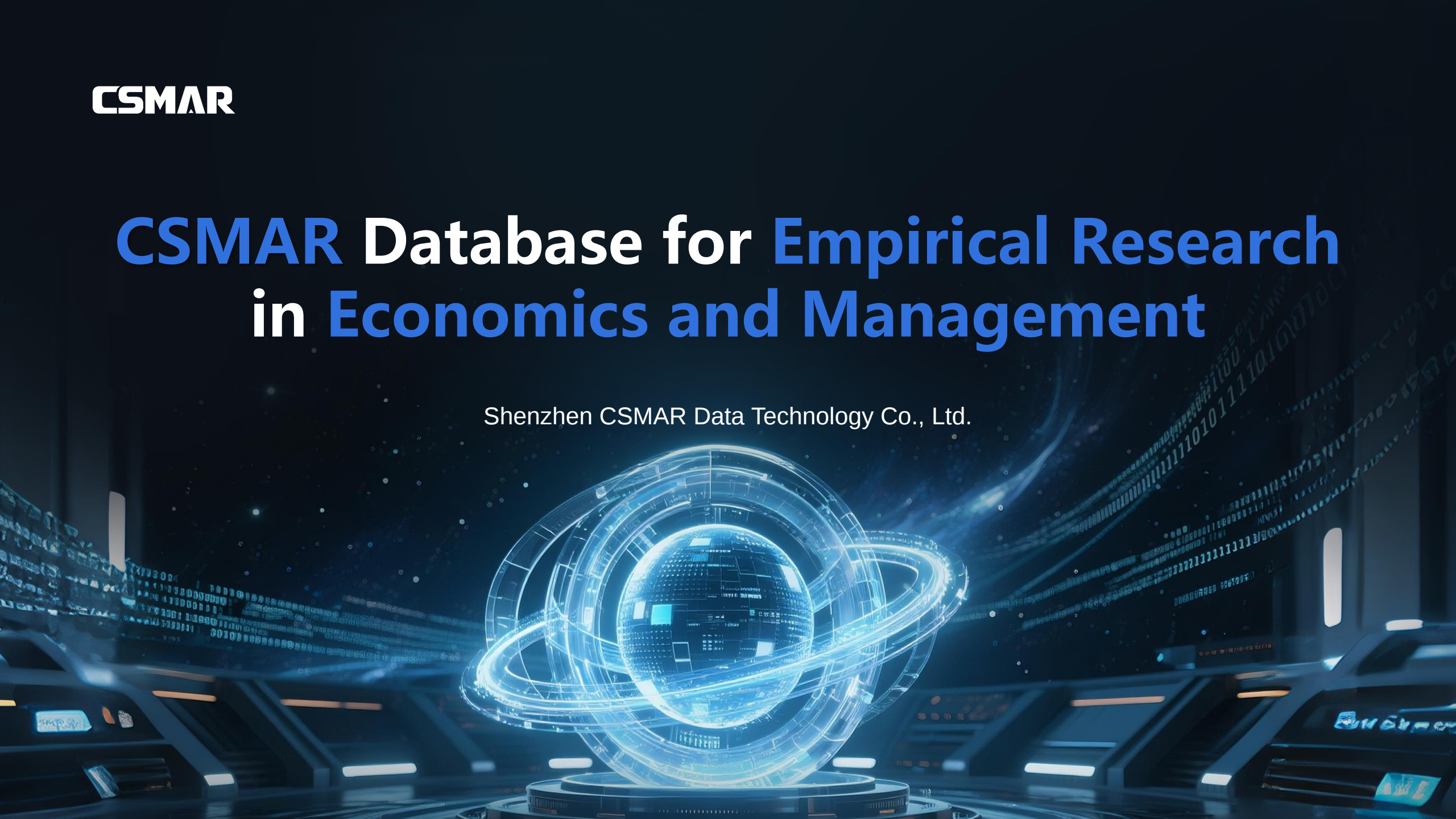


CSMAR

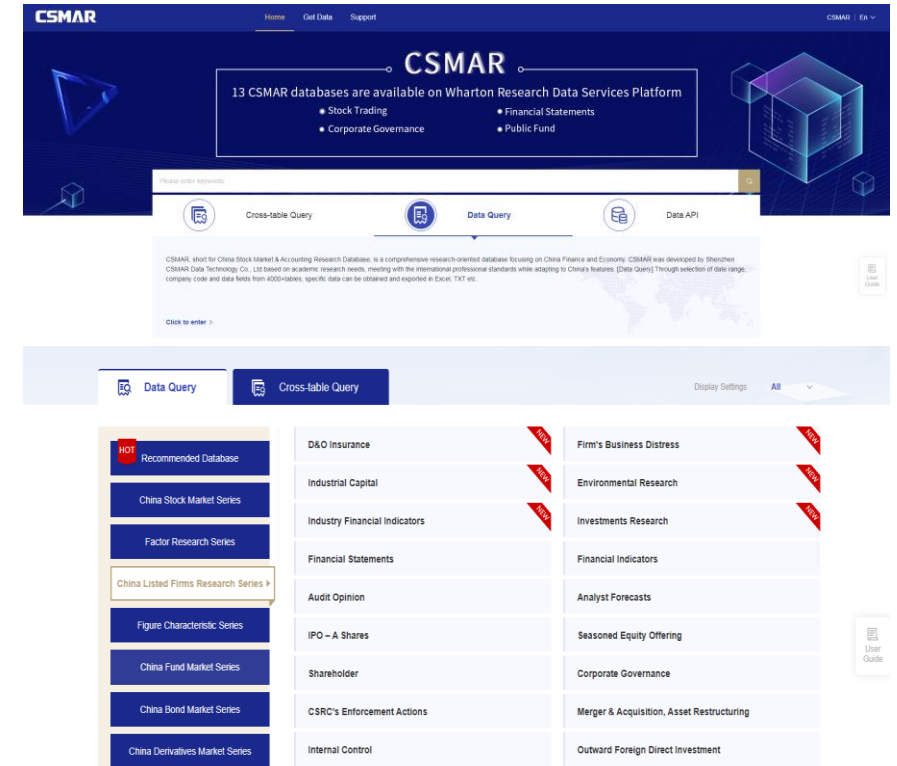
CSMAR Database for Empirical Research in Economics and Management

Shenzhen CSMAR Data Technology Co., Ltd.



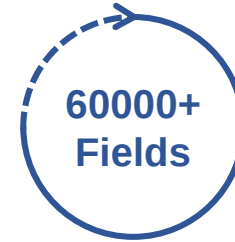
What is CSMAR?

- ◆ CSMAR, China Stock Market and Accounting Research Database
- ◆ Designed and developed by CSMAR Data Technology
- ◆ Intended for Academic Research
- ◆ International Leading Database Standard (CRSP, Compustat)
- ◆ 20+ years of experience in providing economic, financial and accounting data



➤ <https://data.csmar.com/>

What is CSMAR?



China Listed Firms



China Stock Market



China Bond Market



Figure Characteristic



Bank Research



China Fund Market



China Economic



Monographic Study



Factor Research



Overseas Market



China Industry



China Money Market



Green Economy



China Derivatives Market



Intelligent Research



Partner



Historical Data



Market Information



Commodity Market

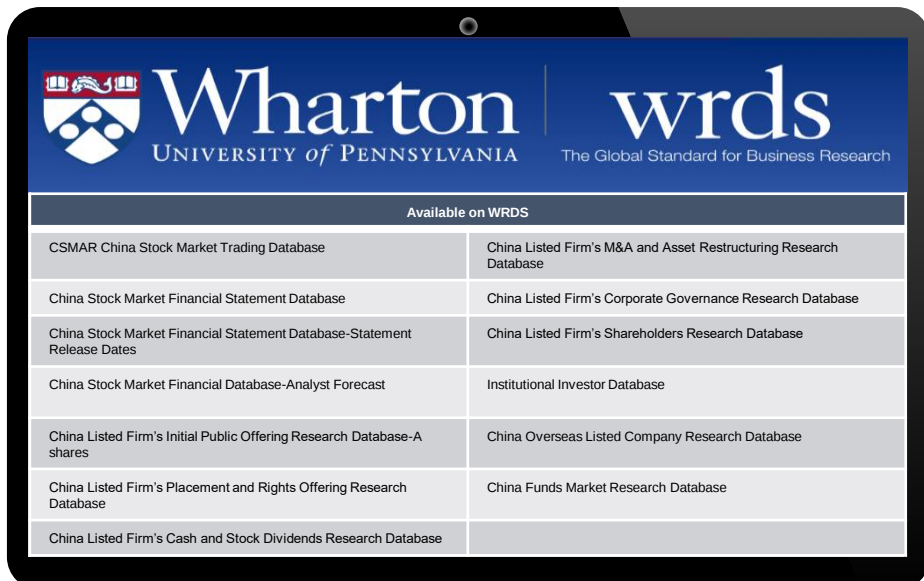


Data Series	Introduction	Featured sub-databases
China Listed Firms Research Series	This series provides comprehensive data on China listed firms, including both the basic information (e.g. financial statements and governance structure etc.) and the latest research hotspots in corporate governance (e.g. D&O insurance). Data from this series provide insight on in-depth analysis of China listed firms.	Financial Statements, Corporate Governance, Financial Indicators, Merger & Acquisition, Shareholder, Dividend Distribution, IPO- A share, Audit Opinion, Related Party Transactions, CSRC's Enforcement Actions, Listed Private Enterprises, Seasoned Equity Offering, Annual/Interim/Quarterly Financial Statements, Listed Firm's Loans, Analyst Forecasts, Analyst Consensus Forecast, Accounting Error Correction, Supply Chain Research, Industrial Capital, Financial Leasing Research, New Third Board Supply Chain, D&O Insurance, Government Audit, Firm's Business Distress, Valuation Adjustment Mechanism, Environmental Research, Accounting Information Quality, Family Firm, Bankruptcy Reorganization, Market Competition, Chairman Speech, Market Analyst Report Text
China Economic Research Series	This series provides data on significant socio-economic topics of China, including the overall and regional economic development, new quality productive forces, digital economy, carbon neutrality, aging population, etc. Data from this series is very helpful for overall study of economic and social development and the policy-making in China.	Macroeconomic, Reginal Economy, Population Aging, Digital Economy, Carbon Neutrality Research
Monographic Study Series	This series provides data on important research topics such as the Belt and Road Initiative, which is the cornerstone of China's regional cooperation. An authoritative and complete dataset on this subject is of great value to relevant studies.	The Belt and Road, Capital Market Regulation, Event Study, Financial Technology Research, Monopoly and Anti-monopoly, Investor Sentiment
China Stock Market Series	This series provides data on China stock market, facilitating the study of China's ever growing capital market.	Stock Trading, Market Index, Stock Market Derivative Index, Trading Indicators, Leading Stock
Factor Research Series	This series provides calculated indicators for financial studies.	Behavioral Finance, Momentum Factors, Stock Liquidity, Realized Indicators,
Green Economy	This series provides data on environmental economy related topics, including resource environment and global warming. In an international attempt to achieve carbon neutrality in time, it is critical to get relevant data on China, one of the major carbon markets, for comprehensive analysis.	Resource Environment, Global Warming, Green Finance
China Industry Research Series	This series provides data on 15 industries including energy, new energy, pharmaceutical, communications among others.	Energy, New energy, Pharmaceutical, Communications
Partner	This series provides data co-developed by CSMAR and other renowned research institutes	Firm's Digital Transformation, Firm' Carbon Disclosure Index

CSMAR & Empirical Research

Authoritative data sources , professional data collection, strict quality inspection:

Accurate, professional and High-quality data



Available on WRDS	
CSMAR China Stock Market Trading Database	China Listed Firm's M&A and Asset Restructuring Research Database
China Stock Market Financial Statement Database	China Listed Firm's Corporate Governance Research Database
China Stock Market Financial Statement Database-Statement Release Dates	China Listed Firm's Shareholders Research Database
China Stock Market Financial Database-Analyst Forecast	Institutional Investor Database
China Listed Firm's Initial Public Offering Research Database-A shares	China Overseas Listed Company Research Database
China Listed Firm's Placement and Rights Offering Research Database	China Funds Market Research Database
China Listed Firm's Cash and Stock Dividends Research Database	

01

- In 2004, Wharton School of the University of Pennsylvania selected CSMAR as its data vendor for China market
- Since 2016, CSMAR has 13 databases available on **WRDS**.

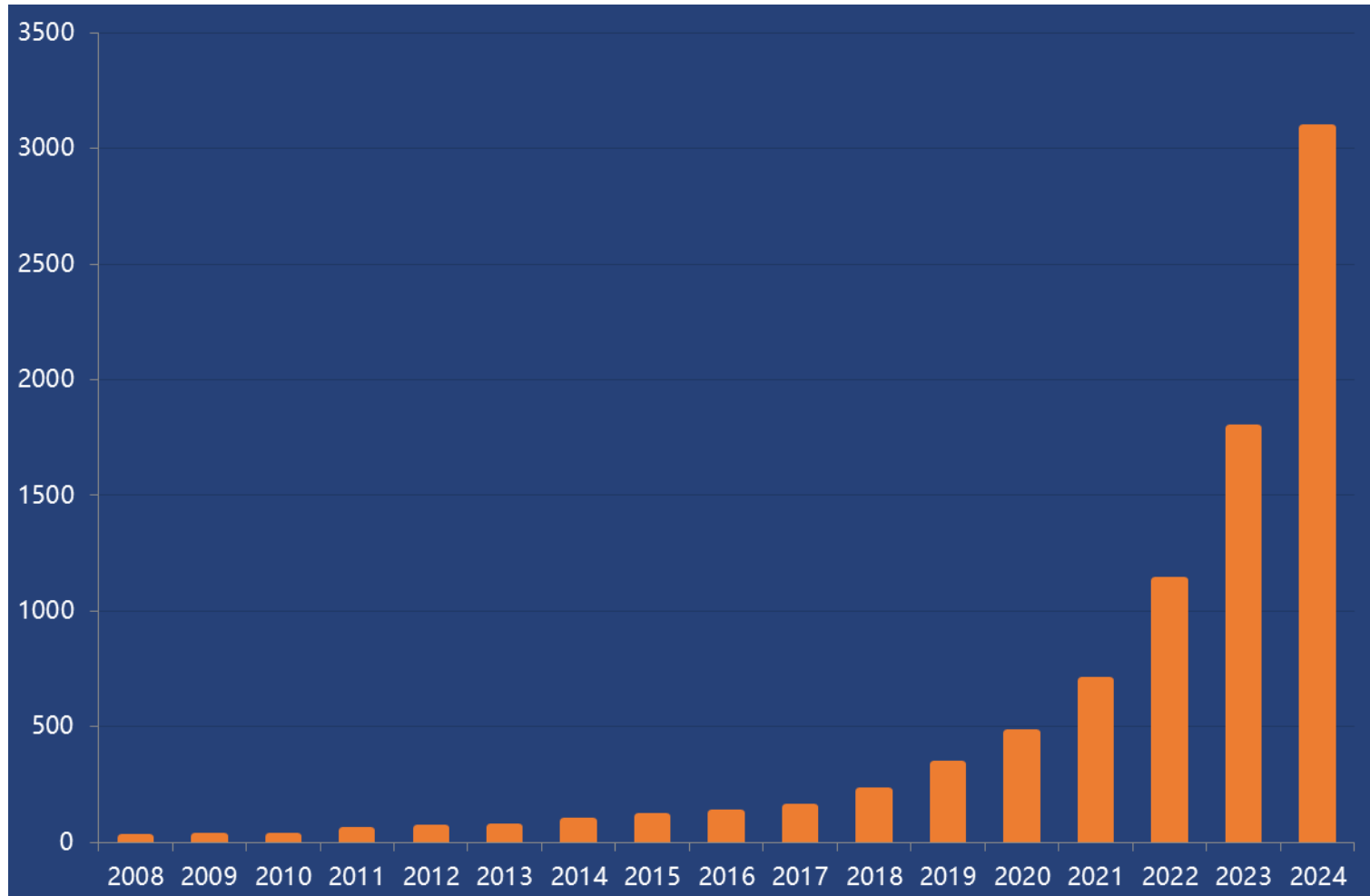
02

- In 2005, MSCI Barra launched **MSCI China A Share Index**, the calculation of which is based on CSMAR data.

03

- Up till June 30th 2025, there have been over **180,000** articles using CSMAR data published in journals home and abroad

CSMAR & Empirical Research



Data Sources: Wiley Online Library ,ScienceDirect, up till 2024.12.31



CSMAR & Empirical Research

China Story

New quality productive forces

Advanced productivity that is freed from traditional economic growth mode and productivity development paths, features high-tech, high efficiency and high quality, and comes in line with the new development philosophy.

01 Innovation

The primary driving force of NQP

02 AI and digital trend

The representative of advanced technological productive forces, providing new momentum for developing NQP

03 Green development

NQP represents a revolutionary enhancement of humanity's ability to improve nature in a holistic and fundamental way

The CSMAR logo is displayed in white, bold, sans-serif capital letters on a dark blue rectangular background.

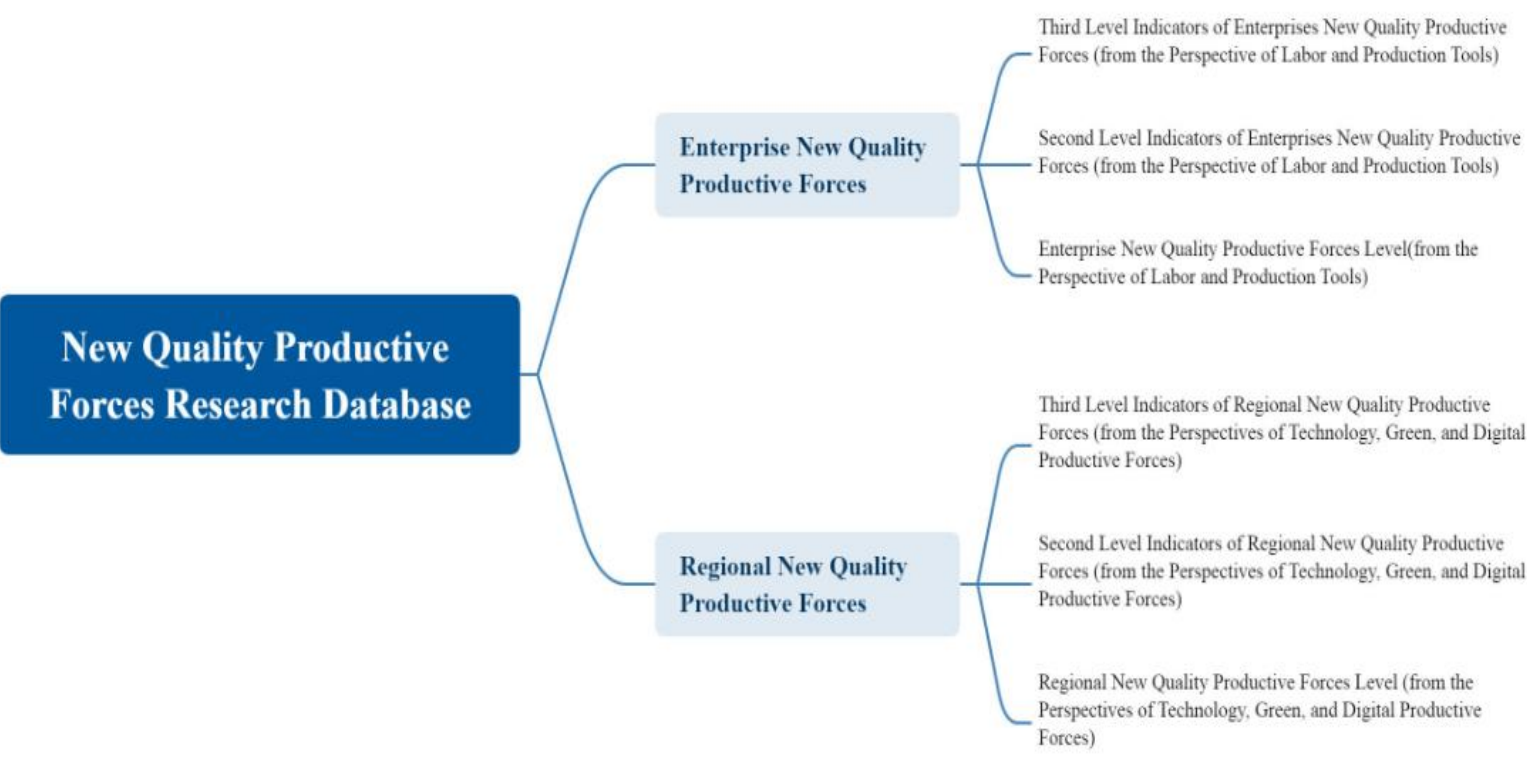
New Quality Productive Forces, Listed Firm's R&D and Innovation, Green Patent, AI Patent, Patent Citation, Artificial Intelligence, China AI Industry Chain Research Database, Digital Economy, Firm's Digital Transformation, China Data Element Research Database, Environmental Research, Carbon Neutrality, Regional Carbon Emission, Climate Risk, Environmental Attention, Green Finance, Macro Economics, ...

CSMAR & Empirical Research

New quality productive forces

CSMAR New Quality Productive Forces Research Database

constructs evaluation index systems for enterprise and regional new quality productive forces from two perspectives: enterprise new quality productive forces and regional new quality productive forces (references: Song Jia et al. 2024 and Lu Jiang et al. 2024), and calculates the level of new quality productive forces of listed companies and provinces in China.



Factor	Sub-factor	Index	Explanation of Indicator Values	Attribute
Labor	Living Labor	Proportion of R&D Personnel Salary	Salaries in R&D Expenses /Revenue	+
		Proportion of R&D Personnel	Number of R&D Personnel/Number of Employees	+
		Proportion of Personnel with Higher Education	Number of Employees with Bachelor's Degree or above/Number of Employees	+
	Materialized Labor (Labor Object)	Proportion of Fixed Assets	Fixed Assets / Total Assets	+
		Proportion of Manufacturing Expenses	(Sub-total of Cash Outflows in Operating Activities + Depreciation of Fixed Assets + Amortization of Intangible Assets + Provision for Impairment - Cash Paid for Goods Purchased and Services Received - Wages Paid to and on Behalf of Employees) / (Sub-total of Cash Outflows from Operating Activity + Depreciation of Fixed Assets + Amortization of Intangible Assets + Provision for Impairment)	+
Tool of Production	Key & Core Technology	Proportion of R&D Depreciation and Amortization	Depreciation and Amortization Expenses in R&D Expenses /Operating Income	+
		Proportion of R&D Rental Fees	Rental Fees in R&D Expenses/Operating Income	+
		Proportion of Direct R&D Investment	Direct Investment in R&D Expenses/Operating Income	+
		Proportion of Intangible Assets	Intangible Assets / Total Assets	+
	Soft Technology	Total Assets Turnover	Operating Income / Average Total Assets	+
		Reciprocal of Equity Multiplier	Owner's Equity/Total Asset	+

CSMAR & Empirical Research

Innovation

Innovation quantity: the number of patent application

Innovation quality: patent citation

Green innovation

Digital innovation

AI innovation

CSMAR Listed Firm's R&D and Innovation Research Database

includes the patent and R&D investment information of listed companies, and extracts financial information from the announcements of listed companies.

CSMAR China Listed Firm's Digital Transformation Research Database

includes the strategic guidance, technology-driven, and organizational empowerment at the level of listed companies, digital achievements (including digital patent) and applications, and environmental support at the medium and macro level.

CSMAR Patent Citation Research Database

(in Chinese)

CSMAR Green Patent Research Database

(in Chinese)

CSMAR AI Patent Research Database

(in Chinese)

CSMAR & Empirical Research

AI and digital trend

Measuring AI development

Firm-level

- ❑ **AI keywords:** employ text analysis methods to count the frequency of AI related words (including "Artificial Intelligence", "Computer Vision", "Cloud Computing", etc.) in annual reports to establish AI indicators.
- ❑ **AI investment:** Firms' investment in AI-related software and hardware.
- ❑ **AI innovation:** the number of AI patents applied for by a firm. The identification of AI patents is based on the International Patent Classification (IPC) or text analysis of patent documents.

Macro-level

- ❑ **Reginal AI development:** the number of AI companies in each city.
- ❑ **Reginal AI investment:** Investment in information transmission, software and information technology service industry.
- ❑ **Robot adoption:**
$$\ln Robot_{jt} = \ln \sum_{s=1}^S \frac{Employ_{s,j,t=2006}}{Employ_{j,t=2006}} \frac{R_{st}}{Employ_{s,t=2006}}$$

the robot installation of industry s in year t

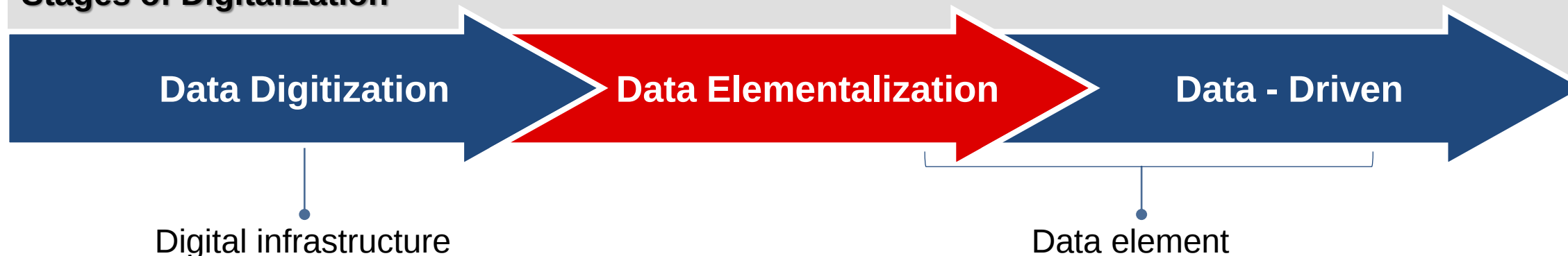
CSMAR Artificial Intelligence Research Database

provides information on artificial intelligence enterprises (including basic enterprise information, shareholder and executive information, financial information), AI level of listed companies, enterprise algorithm filing information, and industrial robot statistics.

CSMAR & Empirical Research

AI and digital trend

Stages of Digitalization



Macro level

Constructing index system, using entropy weight-TOPSIS etc. as evaluation method.

Firm level

Using text analysis to count the number of digital transformation-related feature words in the annual reports of listed firms.

Firm level

Using text analysis to count the number of data element-related feature words (including: data collection, data processing, data use, data carrier, data technology, data value, data source) in the annual reports of listed firms.

CSMAR China Digital Economy Research Database

collects data from 6 aspects: general information, digital industrialization, industry digitalization, Policy and Information, listed firm digitalization.

CSMAR China Data Element Research Database

collects and organizes national data resource survey statistics, and data elements disclosure and the development and utilization index of data elements of listed companies.

CSMAR & Empirical Research

Green development

**Firm's environmental
information disclosure**

CSMAR China Listed Firm's Environmental Research Database

includes data related to environmental performance, environmental disclosure and environmental investment of listed companies.

Carbon Emission

CSMAR Climate Risk Research Database

includes three aspects: climate risk of each province, climate risk of listed companies, natural disasters and emergencies.

Climate Risk

CSMAR Environmental Attention Research Database

provides information such as the annual government work reports of the State Council, provincial governments, and prefectural-level municipal governments.

Environmental Concern

CSMAR Carbon Neutrality Research Database

including environment overview, carbon emission, carbon trading, carbon governance, concept stock, carbon bond, fund, index and credit.

Green Innovation

CSMAR Regional Carbon Emission Research Database

includes carbon emissions from energy activities, industrial production, agricultural activities, land use changes, forestry, and waste disposal in each province.

CSMAR

Thank you for your attention!

Shenzhen CSMAR Data Technology Co., Ltd.

