

Expenditure

# Capital Asset Pricing

Including data assets on balance sheets  
- A breakthrough for local SOEs

4 July 2024

Finances  
Equity  
Incomes

0.

Budget  
ss Profit

Inflation 0.2%+

0.2%+

Valuation Currency

0%

0%

GBP	USD	CNY
1.32	57.69	87.36
7.10	42.80	25.40
6.39	65.25	85.80
7.17	43.04	13.32
1.87	87.84	72.97
6.84	68.85	80.31

change rate 85.90

Market Value 63.35

Amount

LOTPX Automobiles Components

FYMYC Banks

WRTME Capital Goods

TILZK Commercial Services

PFAYF Consumer Durables

HEJCG Diversified Financials

INZAY Energy

KRHIV Food Beverage Tobacco

LEHFG Health Care Equipment

AKCNR Household Product

IHJBM Insurance

KHDOW Media Entertainment

ODRUJ Pharmaceuticals

ZHEDU Real Estate

JNIFK Telecommunication

BFHRY Software technology

**EY** 安永

# Including data assets on balance sheets – A breakthrough for local SOEs

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## Background

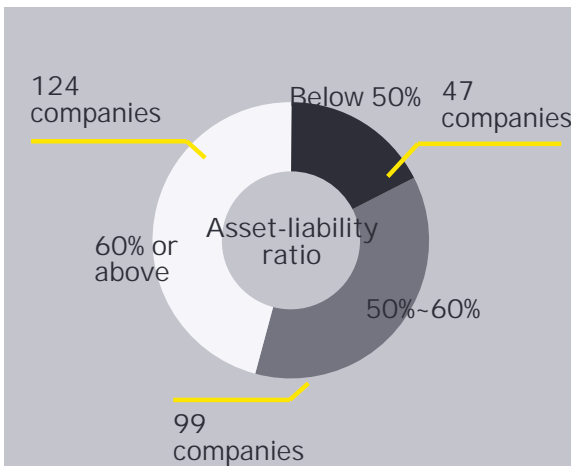
Major powers in the world are racing to the lead digital economy due to an increasingly intense competition.

Globally, the digital economy is seeing unprecedented development and has become a strategic highland, which has been prioritized by countries to set them apart from competition. As big data, cloud computing, artificial intelligence and other technologies are widely used, new products, new models and new industries have emerged and given rise to a new round of industrial transformation. In this context, a new round of competition among digital-driven innovative companies is looming across countries, including China and the United States. The competition focuses on computing power, algorithms and data, and countries are exploring solutions for managing data as a new factor of production.

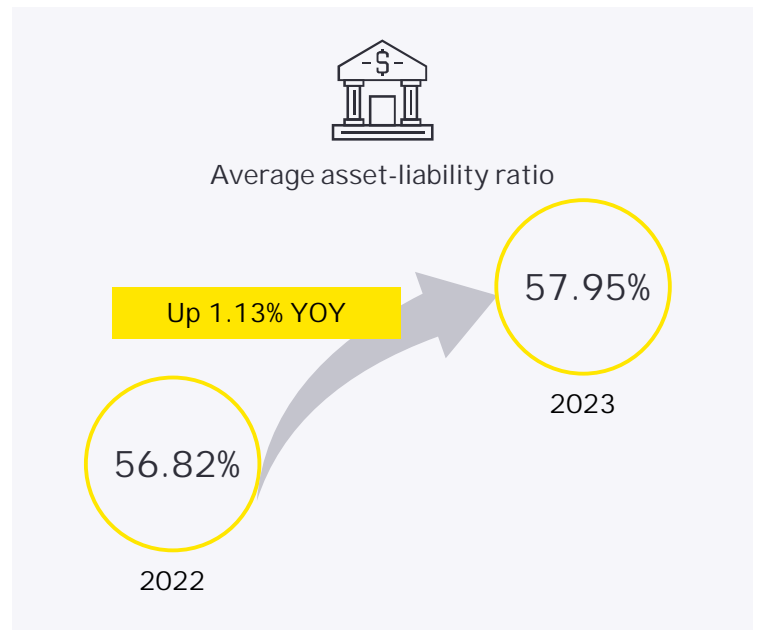
Data assets are expected to inject new vigor to the economic development amid the shift from traditional drivers of growth to new ones.

Domestically, the traditional growth model could no longer move us forward, which is particularly true in the real estate sector, while new quality productive forces are becoming a new growth engine for China's economy. To navigate through tough transformative times, new assets from new growth drivers need to be urgently identified to absorb the excess liquidity. Data resources, a core asset for developing new quality productive forces, serve as a basic element in the new round of technology revolution and industrial transformation and will become a key asset to absorb excess liquidity and boost investment from the whole society.

### Asset-liability ratio by urban development investment company



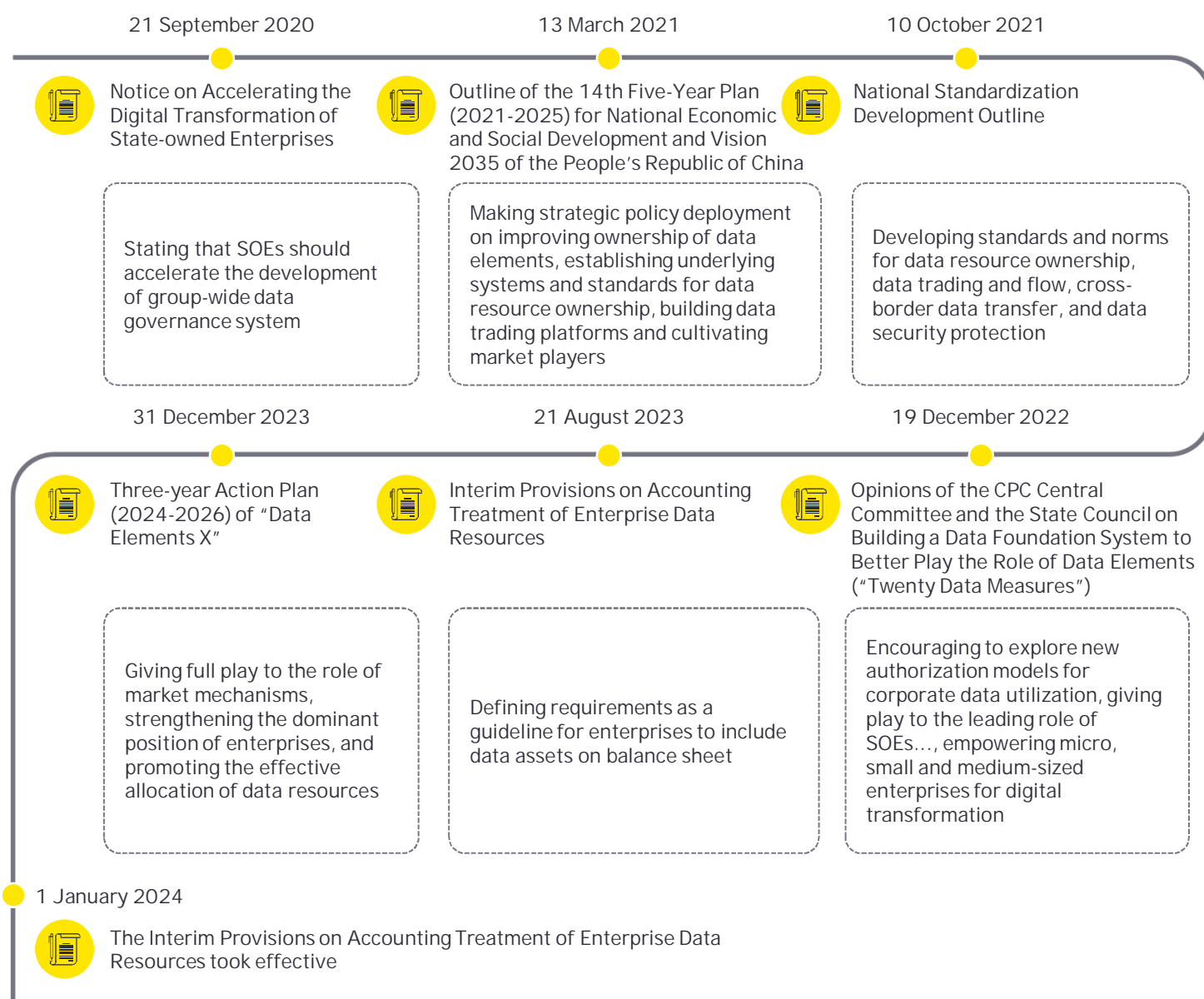
According to the 2023 national ranking of asset-liability ratio by urban development investment companies, a majority of companies had an asset-liability ratio of 60% or above, reflecting a higher level of asset-liability ratio across urban development investment companies



In recent years, local government debt has increasingly become an important issue that generates risks hindering China's economic growth. Local state-owned enterprises (SOEs) have undertaken the important mission to develop infrastructure and lead regional development. Given this, they have suffered from great financial pressure due to their advance investment in the post-real estate era. As China enters a new stage of digitalization, local SOEs are shouldering the responsibility of developing regionwide digital infrastructure, while maintaining huge amount of public data and being able to integrate data from public and corporate sources based on public trust. As such, listing data in the assets column of balance sheets will likely become a key option for SOEs to resolve local debt risks and to lead the development of new quality productive forces.

## Development status quo

On 21 September 2020, the State-owned Assets Supervision and Administration Commission of the State Council (SASAC) issued the Notice on Accelerating the Digital Transformation of State-owned Enterprises, marking a new stage of the SOE digital transformation. Subsequently, the CPC Central Committee and the State Council issued the Opinions on Building a Data Foundation System to Better Play the Role of Data Elements (Twenty Data Measures) to guide enterprises to identify new authorization models, thus further promoting SOEs to exert a pioneering role in authorized use of corporate data. Furthermore, the effectiveness of the Interim Provisions on Accounting Treatment of Enterprise Data Resources on 1 January 2024 provides a clear direction for enterprises to manage data as a balance-sheet asset, marking a new era and an unprecedented acceleration in data elements innovation.



This year, the practice of including data assets on balance sheets have been evident and local SOEs are standing at the vanguard of this innovative endeavor.

Case study: A Qingdao-based SOE included public data resources as assets on balance sheets

A Qingdao-based state-owned corporation included data resources governed by integrating public data with social data – business information validation datasets – as intangible assets and recognized on balance sheets. This marks the first case for the inclusion of data resources on balance sheets in Qingdao.

Case study: A Tianjin-based SOE included public data resources as assets on balance sheet

A Tianjin-based gas company was approved for data asset registration certificate and became the first SOE in the city to be eligible to include data assets on balance sheets. The company engaged a professional organization to provide compliance certification services and issue a certification report on data assets, assuring its compliance with rules and regulations.

However, we need to understand that the inclusion of data assets on balance sheets is still in the stage of exploration, and multiple resources and forces need to be engaged to develop standards, policies and systems in diverse areas including data ownership, data governance, data asset valuation and pricing, accounting treatment of data resources, tax treatment and data security compliance, managing data as a resource and asset to deliver value.

## Suggestions for future practice

The EY organization has a multi-disciplinary team dedicated to reporting data assets on balance sheets. The team comprises professionals from business and technology consulting, transaction valuation, financial accounting and tax services and has conducted research across different regions. In doing so, we provide the following suggestions for future practice.

### ▶ 1. Improving data authorization mechanism

Boasting public data resources, local SOEs need higher level policy support in including public data assets on balance sheets. It is suggested that local governments establish a two-tier licensing system - government-issued licenses and local SOE-issued licenses. The government-issued licenses are granted to local SOEs for market-based development and utilization of public data, while local SOE-issued licenses are granted to qualified second-level licensed organization for public data operation after being masked. Moreover, it is suggested that local SOEs leverage their public trust-based advantages and develop a data ecosystem through a coordinated integration of social data and corporate data to identify solutions to data governance and operation for industrial verticals.

### ▶ 2. Focusing more attention on data governance

Prior to the inclusion of data assets on balance sheets, data resources are expected to be turned into high-quality data assets. Today, a large amount of data stored by governments and organizations are unstructured, fragmented and even conflicting. These data need to be transformed into assets that can be counted on balance sheets through cleansing, governance and reorganization in accordance with industry and enterprise data standards. Going forward, with data resources owned and controlled, SOEs need to develop and improve standards and norms on data management and data opening to build their own governance systems.

▶ 3. Strengthening data operation capability

To transform data assets, as a new means of production, into productive forces (capitalization), it is necessary to define transaction parties and scenarios for data monetization. Data exchanges have been built nationwide, despite this, data trading faces many challenges including data security compliance. We believe that diverse data products and services empowered by data opening and application will unleash potential value of data resources amid industrial development and livelihood improvement. As such, local SOEs need to develop approaches to managing data assets, identify data application scenarios and cost allocation mechanisms throughout the data lifecycle. Moreover, local SOEs need to work with data service and other agencies to create a process encompassing data collection, processing, storage, valuation and trading as well as a list of scenarios.

▶ 4. Developing a practical guide

To disclose data resources as assets included in financial statements, SOEs need to develop a practical guide to standardize and regulate relevant operation process tailored to scenario-based data resources identified. Meanwhile, SOEs need to establish an accounting and disclosure system to include data resources as assets on balance sheets and provide an ongoing mechanism to evaluate economic benefits brought by data-based products or applications. This will help enhance governance and achieve value-led goals with budget management and multi-dimensional analysis.

▶ 5. Defining valuation model

With application scenarios of data resources identified, data assets are classified into categories by valuation or trading activities and valued with the improved income-based approach or cost-based approach. Taking the income-based approach as an example, the contribution of data sources to the accuracy of the model or formula is used as the baseline to calculate the contribution value of each data source (data contributor). The contribution value, as the basis for benefit distribution, is measured with a cooperative game-based approach in the case where data come from multiple sources.

▶ 6. Navigating tax-related challenges

With growing application of data resources, tax regulations and tax-related treatment have become the focus of attention. In the field of finance and taxation, accounting standards are integral to tax-related treatment, including corporate income tax and value-added tax. Therefore, the introduction of interim provisions on accounting treatment will contribute to developing and improving tax policies on data resources. Data, as a new resource, bring new challenges to tax collection and administration in multiple dimensions encompassing data holding, processing, operation and transaction. Moreover, tax disputes may arise in case of cross-border transactions and valuation related issues due to uniqueness of data resources and inadequate tax rules. To address these issues, further research is needed.

▶ 7. Sticking to the bottom line to prevent data security risks

It is suggested that local SOEs build an internal data security system based on application scenarios, and strengthen capabilities in data security management, technology, operation and oversight, as well as all-round data security services. Meanwhile, the flow of data elements within the framework of legal compliance is the key for enterprises to advance the inclusion of data assets on balance sheets. As the “gate” to unleash the value of public data, SOEs should live by high standards, and prevent major risks from undermining the legitimate rights and interests of data sources, endangering public interests, and overvaluing data assets.

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## Conclusion

Gaining momentum, data elements are empowering economic development, however, the inclusion of data assets on balance sheets is at an intersection, where issue to be addressed converge. Amid competition in large language models and computing power among major economies, SOEs need to adapt to changing trends and unleash the value of public data and corporate data to support the development of digital economy. EY teams will leverage its advantages in resources and services as a professional organization to support SOEs in including data assets on balance sheets by providing practical solutions encompassing data governance, data operation and transaction, listing data in the assets column of balance sheet, data-based tax application, data asset valuation and data security.

For more information or business enquiry, please contact us.



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