

Business Data Analysis of iFlytek

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Abstract: This paper mainly analyses the economic issue of iFlytek and similar enterprises in the period of 2019 to 2023 from the perspective of investors while providing reasonable forecasts and suggestions for investors. Founded in 1999 and headquartered in Hefei, Anhui Province, China, iFlytek is a leading provider of intelligent voice and artificial intelligence technology. Its core technologies include speech recognition, natural language processing and machine learning, which are widely used in many fields, such as education, finance, medical care, automobiles, and smart homes. This article analyses financial indicators such as operational capacity, profitability, and debt-paying ability, focusing on iFlytek's cash flow management, resource utilisation efficiency, profit level, and debt risk. Analysing these data shows that iFlytek performs well in cash flow management, asset turnover, and expense management and has a stable financial situation. Although there are certain fluctuations in profitability and debt-paying ability, it generally shows strong growth potential. To sum up, iFLYTEK's strategic layout in artificial intelligence and technology, continuous investment in research and development, and international expansion have endowed it with the potential for long-term growth, making it an attractive investment option. Investors should maintain an optimistic attitude towards iFLYTEK's future development.

1. Introduction

The essay mainly focuses on analysing the economic conditions of iFlytek and several other companies in the same industry in recent years from investors' perspectives, providing them with reasonable forecasts and giving suggestions on whether to invest.

To brief introduction, IFLYTEK Co., Ltd. is a leading intelligent voice and artificial intelligence technology provider headquartered in Hefei, Anhui Province, China. Founded in 1999, iFlytek has been committed to developing and promoting core technologies. IFLYTEK is known for its excellence in speech recognition technology, and its products include speech recognition, speech synthesis, speech translation, and applications related to artificial intelligence. These technologies are widely used in education, finance, healthcare, automotive, smart home and other industries [1].

IFLYTEK mainly focuses on education, intelligent customer service, medical and health, and in-vehicle systems. It has invested many resources in research and development, has several independent intellectual property rights, and has an internationally leading technical team [2]. It has some research institutes and cooperates with several universities to explore cutting-edge technologies.

Iflytek's vision is to "make the machine can listen, speak, understand and think" and promote the

development of the artificial intelligence industry through continuous technological innovation so that intelligent voice technology can better serve society and public life. Through the continuous progress of technology and the continuous expansion of applications, IFlytek occupies an important position in the global field of artificial intelligence and voice technology, providing new possibilities for the technology-enabled society [3].

2. Methodology

To better compare the economic situation of IFLYtek in recent years to give a conclusion, it will be analysed in different aspects:

2.1 Operating capacity

Revenue to cash ratio, net to cash ratio, Total Assets Turnover;

2.2 Profitability

Non-roce, expenses to sales ratio, the net profit margin on sales;

2.3 Solvency

The current ratio, quick ratio, and cash ratio.

Every ratio Shows different aspects of the company's economics. For example, Earnings per share (EPS) and the Price/Earnings Ratio (P/E) provide insights into market valuations, helping investors assess whether a company is undervalued or overvalued relative to its earnings. Combined with return on equity, these indicators give a more complete picture of a company's performance and long-term viability.

Through the gradual analysis of the phenomena shown in each data set, we can gain a more specific and in-depth understanding of a company's economic situation at this stage, giving investors more objective suggestions.

3. Analysis and discussion

3.1 Operating capacity

From an economic point of view, a company's Operating Capacity refers to its ability to effectively use its resources (such as labor, equipment, capital, etc.) to produce and provide services within a certain period of time [4]. Operational capability often reflects how efficient a company is in different parts of its production or service process, especially in terms of demand fluctuations and resource allocation.

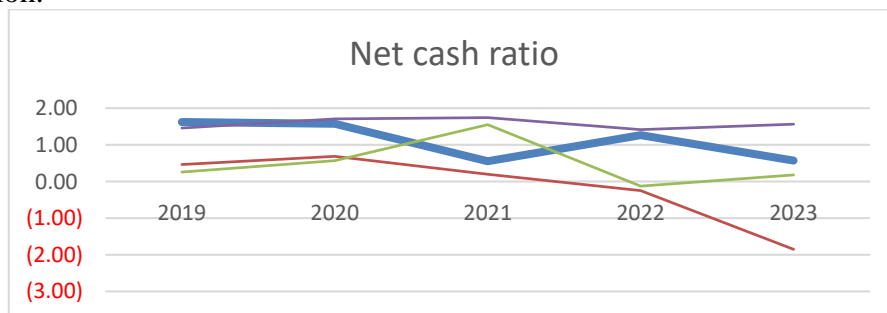


Figure 1: Net cash ratio

Table 1: Net cash ratio

	2019	2020	2021	2022	2023
Iflytek	1.62	1.57	0.55	1.26	0.57
360Security	0.46	0.68	0.20	-0.25	-1.85
Yonyou	0.26	0.57	1.55	-0.13	0.18
WPS	1.46	1.71	1.74	1.42	1.57

The Net Cash Ratio is an indicator of a company's financial health and ability to repay its debts, calculated by:

$$\text{Net cash ratio} = \frac{\text{cash} - \text{current liability}}{\text{total asset}}$$

This ratio reflects the ratio of the company's net cash (cash minus short-term liabilities) to its total assets. It reflects the company's ability to meet its financial obligations from its existing cash resources without borrowing or external financing [5].

Iflytek's net cash ratio was stable between 2019 and 2023. Despite short-term fluctuations in 2021, it remained at a high level overall, indicating that its cash flow is healthy and it has sufficient cash resources to meet its short - and long-term financial obligations, enhancing its financial security. (Table 1) (Figure 1)

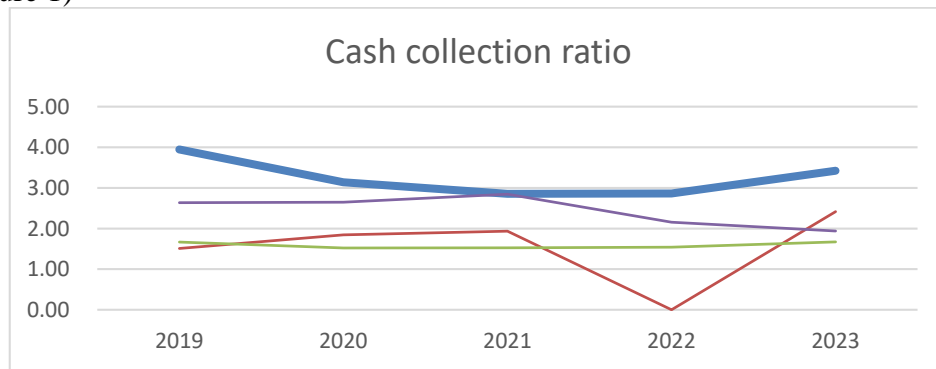


Figure 2: Cash collection ratio

Table 2: Cash collection ratio

	2019	2020	2021	2022	2023
Iflytek	3.14	2.86	2.86	3.42	0.57
360Security	1.84	1.93	0.00	2.42	-1.85
Yonyou	1.52	1.52	1.54	1.67	0.18
WPS	2.65	2.84	2.16	1.94	1.57

The "Cash Collection Ratio" indicates a company's efficiency in collecting customer payments [6]. It is calculated by

$$\text{Cash collection ratio} = \frac{\text{total cash}}{\text{total receivables}}$$

This ratio helps assess how effectively a company turns its receivables into cash, which is crucial for maintaining healthy cash flow and ensuring liquidity [7].

From 2019 to 2023, iFlytek's cash collection ratio showed a generally stable trend. Although it showed slight fluctuations in 2020 and 2021, it remained high, which suggested Iflytek's efficient ability to convert receivables into cash. The overall positive performance of Iflytek's cash collection ratio indicates strong cash flow management, enabling the company to meet its financial obligations

efficiently and sustain operations without significant liquidity concerns. (Table 2) (Figure 2)

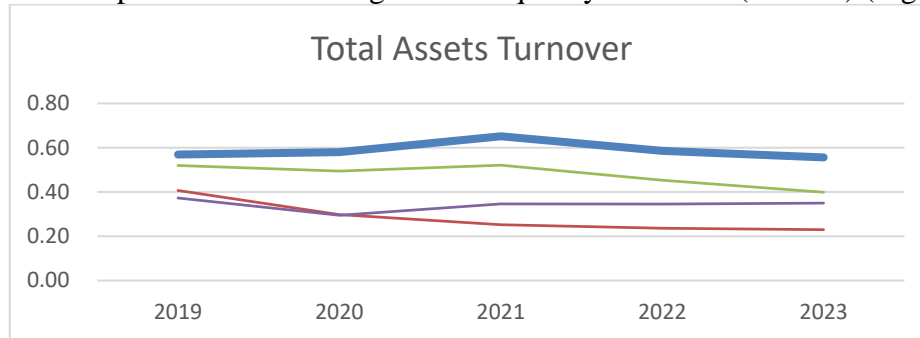


Figure 3: Total assets turnover

Table 3: Total assets turnover

	2019	2020	2021	2022	2023
Iflytek	0.57	0.58	0.65	0.59	0.56
360Security	0.41	0.30	0.25	0.24	0.23
Yonyou	0.52	0.49	0.52	0.45	0.40
WPS	0.37	0.29	0.35	0.35	0.35

Total assets turnover is a measure of a company's efficiency in generating revenue from its total assets, calculated by the following equation.

$$\text{total assets turnover} = \frac{\text{operation revenue}}{\text{total assets}}$$

Through its total assets in a certain period, revealing the efficiency of the company's asset utilisation, This ratio reflects the sales achieved by the company in a certain period.

Iflytek's total asset turnover rate for 2019-2023 was relatively stable. Despite some fluctuations in 2020 and 2021, it remained at a high level, which indicates the company's high efficiency in generating revenue from total assets. Although it will decline by 2023, the overall trend still shows that iFlytek is using its assets more efficiently, effectively driving its growth and profitability. (Table 3) (Figure 3)

Summary. To sum up, the period from 2019 to 2023 was robust, with Iflytek demonstrating its strong operational capabilities and financial management level. The company's net cash ratio remains high, indicating good cash flow management ability to meet short - and long-term financial obligations and ensure financial security. The cash recovery ratio demonstrates the company's efficiency in converting accounts receivable into cash, ensuring adequate liquidity. The Total asset turnover ratio reflects IFlytek's efficiency in asset utilisation, which promotes the company's continued growth and profitability. These financial indicators together show IFlytek's competitiveness in resource utilisation, financial management and market adaptation, guaranteeing its sound operation and future development.

3.2 Profitability

Earning capacity is a crucial measure of a company's capability to generate profits through its operational activities. It reflects how effectively a company produces revenue through its revenues, assets, or equity. Earning capacity is essential for a business's sustained existence and expansion and for the decision-making of investors, management, and other stakeholders. Investors utilise profit metrics to evaluate a company's financial well-being, establish stock valuation, and guide investment choices. Conversely, management examines earning capacity to uncover operational weaknesses and

implement strategic changes. Moreover, it can enhance shareholder value through robust earning capacity, increasing dividends, elevated share prices, and more favourable financing opportunities [8].

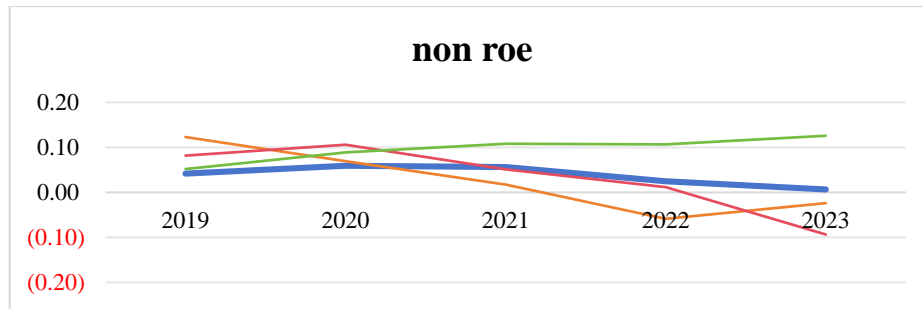


Figure 4: Non-ROE

Table 4: Non-ROE

	2019	2020	2021	2022	2023
Iflytek	0.04	0.06	0.06	0.02	0.01
360Security	0.12	0.07	0.02	-0.06	-0.02
Yonyou	0.08	0.11	0.05	0.01	-0.09
WPS	0.05	0.09	0.11	0.11	0.13

Withholding NROE is a ratio that can provide insight into how a company uses shareholders' equity, especially whether it chooses to retain or distribute profits. This ratio can serve as an important indicator of a company's financial health and its ability to reinvest and grow without relying on external financing. In addition, the indicator can provide stakeholders, including investors and management, with an important reference for capital allocation and dividend policy, helping them to make more informed strategic decisions. [9]

$$\text{NON ROE} = \frac{\text{Withholding profit attributable}}{(\text{Net assets initially} + \text{Net assets at the end}) \div 2}$$

Iflytek's non-net asset return (NROE) showed some volatility from 2019 to 2023. Although the indicator declined overall, especially in 2022, it still showed a strong return level compared to other companies. Especially in 2023, despite large fluctuations, IFlytek's non-net asset return rate remained in a relatively high range, indicating that it still has high benefits in using non-net assets. (Table 4) (Figure 4)

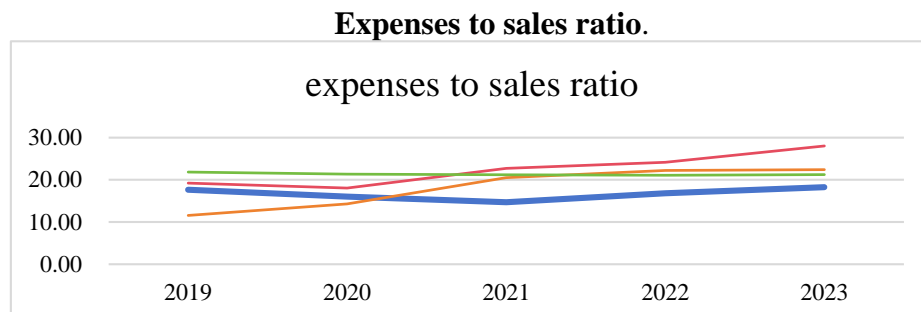


Figure 5: Expenses to sales ratio

From 2019 to 2023, iFlytek's expense-to-sales ratio showed a relatively stable trend. While there was a decline in 2020 and 2021, it rose again in 2022 and 2023. This indicates that the company's efficiency in managing expenses has remained stable.

Despite the upward trend, iFlytek's expense ratio remains competitive among peers, which means

its expense management strategy continues to support the company's operational capabilities and profitability; this is certainly a good omen. (Table 5) (Figure 5)

Table 5: Expenses to sales ratio

	2019	2020	2021	2022	2023
Iflytek	17.66	16.00	14.70	16.81	18.24
360Security	11.57	14.29	20.52	22.21	22.41
Yonyou	19.20	18.02	22.70	24.14	28.00
WPS	21.83	21.35	21.19	21.06	21.23

The ratio of expenses to sales is an important index to measure a company's cost control and operating efficiency. It is calculated by

$$\text{expense to sales ratio} = \frac{\text{total expense}}{\text{total sales}}$$

This ratio helps assess how effectively a company manages expenses related to sales revenue, which is important for profitability and financial stability. A lower ratio indicates that the company is more efficient at converting sales into profit, as a smaller portion of its revenue is spent on operational costs. Conversely, a higher ratio may suggest inefficiencies in managing expenses, negatively affecting the company's profit margins and overall financial health [10].

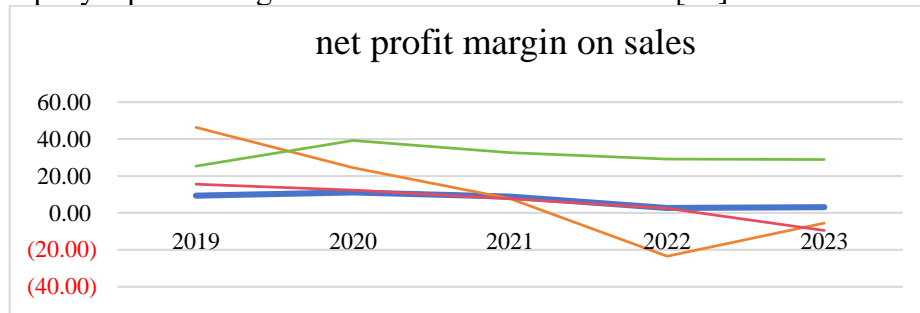


Figure 6: Net profit margin on sales

Table 6: Net profit margin on sales

	2019	2020	2021	2022	2023
Iflytek	9.36	11.07	8.80	2.65	3.12
360Security	46.33	24.43	7.72	-23.46	-5.51
Yonyou	15.53	12.33	7.64	2.43	-9.53
WPS	25.36	39.21	32.59	29.11	28.85

The net profit margin on sales is an important index used to measure the efficiency of a company's collection, which is critical to maintaining a healthy cash flow and ensuring liquidity. Whether the company can convert the majority of sales into profit while effectively managing the collection of accounts receivable and reducing outstanding debt can be judged by this ratio [11]. This ability reflects the efficiency of a company's operations and plays an important role in maintaining the company's financial stability and future growth.

$$\text{net profit margin on sales} = \frac{\text{actual recovered cash}}{\text{gross accounts receivable}}$$

Iflytek's cash recovery ratio shows a stable trend between 2019 and 2023. Although some fluctuations appeared in 2020 and 2021, the overall level remained high, indicating that the company demonstrated a high-efficiency level in converting receivables into cash. This continued good

performance highlights iFlytek's strong ability in cash flow management, allowing it to meet its financial obligations efficiently and maintain operations, avoiding significant liquidity issues. (Table 6) (Figure 6)

Summary. From 2019 to 2023, Iflytek has demonstrated strong financial performance and solid operational capabilities. Although the non-net asset return (NROE) fluctuates, it remains generally high, especially in 2023, showing efficient returns on companies' use of non-net assets. The selling expense ratio was stable in this period, and despite an increase in 2022 and 2023, it still demonstrates the company's good expense control ability. The cash recovery ratio remained stable, indicating that iFlytek could efficiently convert receivables into cash, ensuring the company's good cash flow management. IFlytek maintained excellent financial health, operational efficiency and market competitiveness, laying a solid foundation for its sustainable development.

3.3 Solvency

Solvency refers to the ability of a company to meet its financial obligations over a long period, particularly the ability to rely on its assets to repay all its debts when the liabilities on its balance sheet come due. Solvency is one of the important indicators used to measure the financial health of enterprises, and it is directly related to whether enterprises can continue to operate and maintain long-term stability without borrowing new debts. Solvent companies can better weather economic downturns, invest in future growth opportunities, and meet long-term financial commitments [12]. It reflects a company's ability to manage risk, repay debt and ensure financial stability.

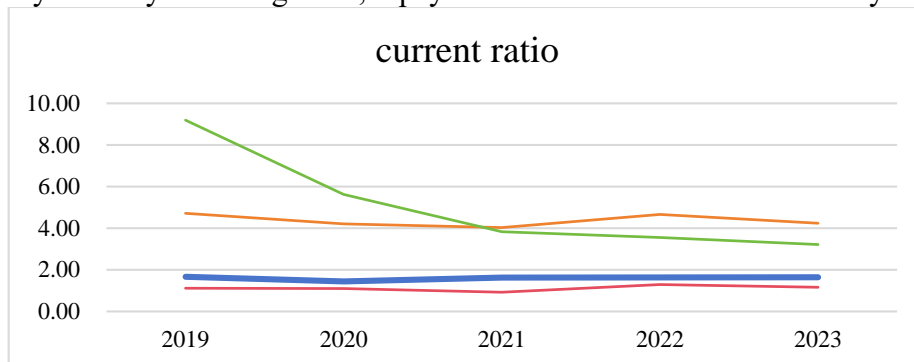


Figure 7: Current ratio

Table 7: Current ratio

	2019	2020	2021	2022	2023
Iflytek	1.66	1.44	1.63	1.64	1.64
360Security	4.71	4.21	4.03	4.66	4.24
Yonyou	1.12	1.10	0.92	1.29	1.16
WPS	9.19	5.63	3.83	3.55	3.22

The current ratio is a key financial metric used to assess a company's short-term liquidity and ability to meet short-term obligations. It is calculated by

$$\text{current ratio} = \frac{\text{dividing current assets}}{\text{current liabilities}}$$

This ratio helps assess the company's ability to repay short-term liabilities with short-term assets, reflecting its financial health and solvency [13].

From 2019 to 2023, iFlytek's current ratio showed a steady trend, with only a slight decline between 2019 and 2020; this ratio remained relatively stable in the period mentioned above, with slight fluctuations in 2021, 2022 and 2023. This stability indicates that iFlytek has maintained a good

ability to meet short-term financial obligations. This shows that iFlytek is very effective in managing its current assets and liabilities and maintaining financial stability even during periods of market volatility. (Table 7) (Figure 7)

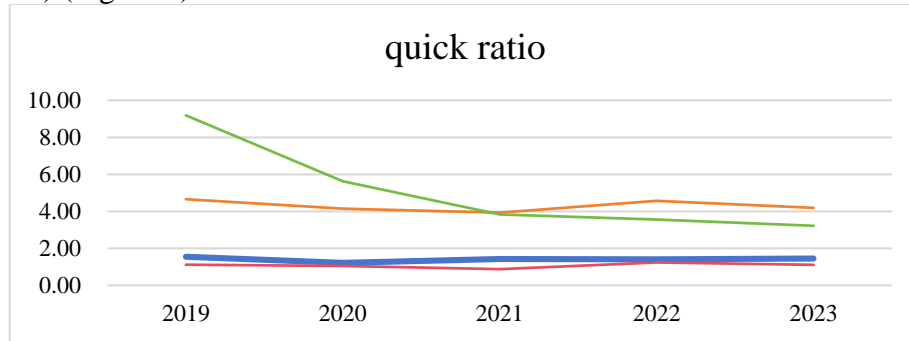


Figure 8: quick ratio

Table 8: quick ratio

	2019	2020	2021	2022	2023
Iflytek	1.54	1.21	1.42	1.41	1.45
360Security	4.66	4.15	3.93	4.57	4.19
Yonyou	1.11	1.05	0.87	1.24	1.11
WPS	9.19	5.62	3.83	3.55	3.22

The current ratio is an important indicator of a company's short-term solvency. It helps to judge whether a company can meet its short-term liabilities with the help of its short-term assets, thus providing insight into the company's financial health and solvency. It is calculated by dividing current assets by current liabilities.

$$\text{quick ratio} = \frac{\text{dividing quick assets}}{\text{current liabilities}}$$

All in all, from 2019 to 2023, iFlytek's quick ratio shows a steady trend. Despite a slight decline between 2019 and 2020, the rate changed less in subsequent years and remained relatively stable in 2021, 2022 and 2023. This shows that iFlytek has maintained a strong debt servicing capacity while dealing with short-term liabilities. Although the current ratio has declined over the past few years, iFlytek's ratio has remained high compared to other companies, demonstrating its strong liquidity management capabilities and financial stability. This demonstrates iFlytek's ability to effectively manage its quick assets and current liabilities, ensuring its financial stability in market volatility. (Table 8) (Figure 8)

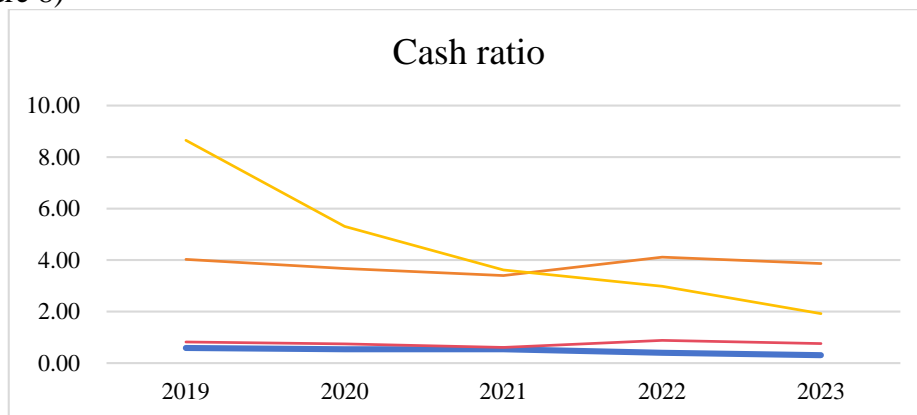


Figure 9: Cash ratio

Table 9: Cash ratio

	2019	2020	2021	2022	2023
Iflytek	0.59	0.54	0.54	0.40	0.31
360Security	4.03	3.67	3.40	4.12	3.87
Yonyou	0.82	0.75	0.61	0.88	0.76
WPS	8.65	5.31	3.62	2.99	1.92

The cash ratio is an important indicator of a company's short-term debt repayment ability, which helps to evaluate the company's ability to pay short-term liabilities directly with cash without relying on other current assets (such as accounts receivable, inventory, etc.). The cash ratio is calculated by dividing a company's cash and cash equivalents by its current liabilities. A higher cash ratio indicates that the company has more cash to cover its short-term obligations, signalling strong liquidity and a lower risk of financial distress. Conversely, a lower cash ratio may suggest potential liquidity issues, as the company may struggle to meet its short-term obligations without depending on other forms of current assets [14]. (Figure 9) (Table 9)

$$\text{cash ratio} = \frac{\text{dividing quick assets}}{\text{current liabilities}}$$

From 2019 to 2023, IFlytek's cash ratio has shown a downward trend year by year, especially after 2020, when it dropped significantly. This indicates that iFlytek is facing some pressure in cash management, possibly because the company has stepped up investments or other capital operations. However, despite the decline, iFlytek's cash ratio remains low relative to peers, reflecting the company's reliance to some extent on cash flow to meet short-term debt repayments.

Summary. From 2019 to 2023, IFlytek's debt repayment ability will be stable, and its current, quick, and cash ratios will reflect its ability to repay short-term debt. The current ratio remained stable, declining slightly between 2019 and 2020, indicating strong liquidity management. The quick ratio has remained stable, highlighting IFlytek's strong solvency in managing short-term liabilities. However, the cash ratio has experienced a decline, especially after 2020, which indicates some pressure on cash management, possibly due to increased investment. Nevertheless, IFlytek's overall financial position remains strong and effective asset-liability management ensures long-term financial stability.

4. Future layout and development

4.1 International business expansion

On August 1, 2024, IFlytek said that in the future, in scientific research cooperation, IFLYtek will strengthen cooperation with high-end artificial intelligence institutions and universities in Hong Kong (China) and overseas and build a rich scientific research ecology. Regarding international business exploration, we will actively expand international business, promote the expansion of education and consumer services in overseas markets, and lead the core technology to enter the international market. In the capital market docking, developing international funds and overseas trade platforms is needed to attract Southeast Asia, Europe, and other high-value-added market funds [15].

4.2 Listing Plan of Subsidiaries

On July 26, 2024, IFLYtek Medical Technology Co., LTD., a subsidiary of IFLYtek Holdings, intends to issue no more than 23.1 million overseas listed ordinary shares and list them on the Stock Exchange of Hong Kong (China). In addition, 14 shareholders of iFlytek Medical intend to convert

70.26 million domestic unlisted shares into overseas listed shares and list them on the Hong Kong (China) Stock Exchange. The matter has been filed with the China Securities Regulatory Commission [16].

4.3 Spark large model enabling hardware equipment

IFLYtek AI's large model and artificial intelligence project won the bid, and AI from the trend has been deployed in many major industries. Based on IFlyspark V4.0 model capabilities, iFLYtek fully builds AI assistants that understand you better; the first 14 agents are online, showing personalised applications for professional fields, the upgraded iFLYtek Medical APP, iFlytek AI learning machine, and Spark Intelligent marking machine - 30 seconds to correct 15 student assignments, and the Star Fire voice model is further upgraded. It can recognise 74 languages and dialects without switching dialogue and solve the speech recognition problem in strong interference scenes. In addition, IFlytek also released the Spark enterprise agent platform and launched the Spark business assistant, Spark bid evaluation assistant and other typical agent cases [17].

5. Summary

From the analysis above, iFLYTEK presents a strong and stable financial position, demonstrated by its robust operating capacity, solid profitability, and sound solvency. The company has shown strong cash flow management and efficient resource utilisation, as evidenced by its high net cash ratio, cash collection ratio, and total asset turnover. Although some fluctuations in profitability and solvency ratios were observed, iFLYTEK's overall financial health remains solid, with high asset returns and strong expense management. The company's continuous investments in R&D, innovative AI technologies, and expansion into international markets further highlight its potential for sustained growth and long-term viability.

Given the company's strategic focus on expanding its international business, strengthening its AI capabilities, and advancing its subsidiaries, iFLYTEK is well-positioned for future success. While certain risks may be related to cash flow and market fluctuations, the company's overall growth trajectory, strong financial management, and strategic investments make it an attractive investment option in the AI and technology sector. Investors should remain optimistic about iFLYTEK's future as it expands its market presence and leads in cutting-edge technologies.

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