



**RESEARCH ON THE KEY FINANCIAL PERFORMANCE AFFECTING
SUSTAINABLE GROWTH OF INTERNET ENTERPRISES --A CASE
STUDY OF TAKING PDD HOLDINGS INC.**

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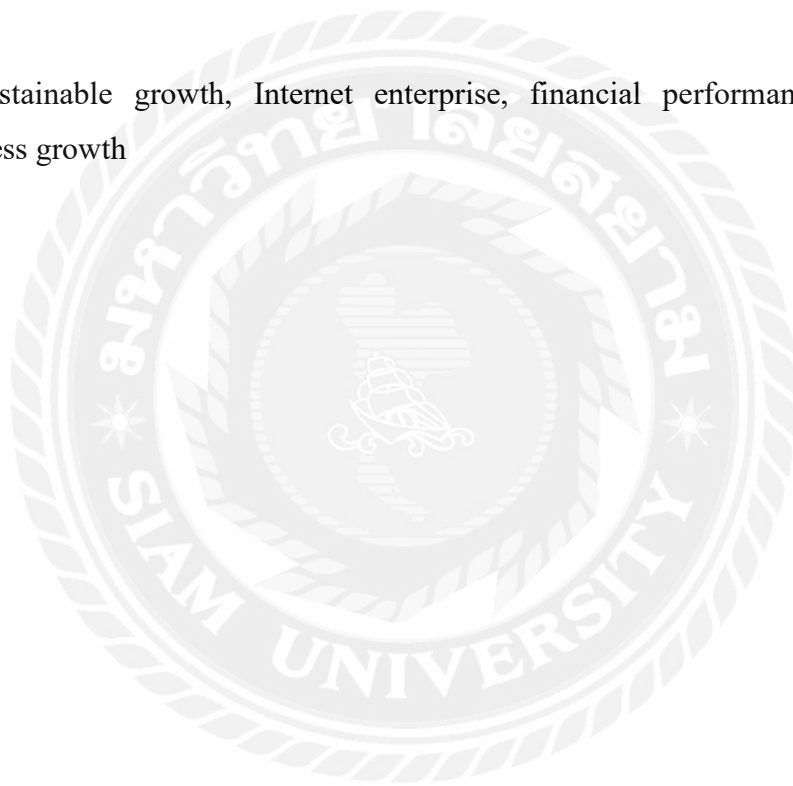
Abstract

The purpose of this study was to research the relationship between the growth rate of enterprises and their financial resources and capabilities is crucial to the sustainable growth of Internet enterprises. The four objective of this study are:1)To determine the existing financial profitability of Pinduoduo Internet enterprises financial performance evaluation sustainable growth.2)To find out the sustainable growth of the existing debt risk of Pinduoduo Internet enterprises.3)To ascertain the existing financial development ability of pinduoduo Internet enterprises financial performance evaluation sustainable growth.4)To settle the existing cash flow capacity of Pinduoduo Internet enterprises financial performance evaluation sustainable growth.

The paper viewed the defects of enterprises themselves and the need to be solved to the maximum extent, took Pinduoduo Internet Enterprise, a listed company in the Internet and related services industry, as the research object and collect and collate the panel data of the sample enterprise from 2019 to 2023 and the panel data after listing, and based it on their profitability, development ability. Then, it analyzed the current situation of sustainable growth of Chinese Internet enterprises and then used financial indicators to conduct empirical research on the sustainable growth of Pinduoduo Internet enterprises. Quantitative analysis and factor analysis was used to explore the key financial performance indicators that affected the sustainable growth Pinduoduo Internet enterprises. Based on resource-base theory as the main theory, growth theory and theory of financing structure as the theoretical support of this study. The

results showed:1) there was a significant difference between the actual growth rate and the sustainable growth rate, and the sustainable growth of Pinduoduo Internet enterprises was not very optimistic;2) Profitability, debt risk, development ability and business growth had a specific impact on the financial performance evaluation and sustainable growth of Pinduoduo Internet enterprises, of which profitability had the greatest impact;3) The main reason for the decline in the sustainable growth ability of Pinduoduo Internet enterprises was the continuous decline in profitability. This paper hopes to study the impact of debt risk and business growth on the sustainable growth of Internet enterprises, and reduce financial risks in order to make Pinduoduo enterprises steadily improve the level of return on capital and better guide their business behaviour.

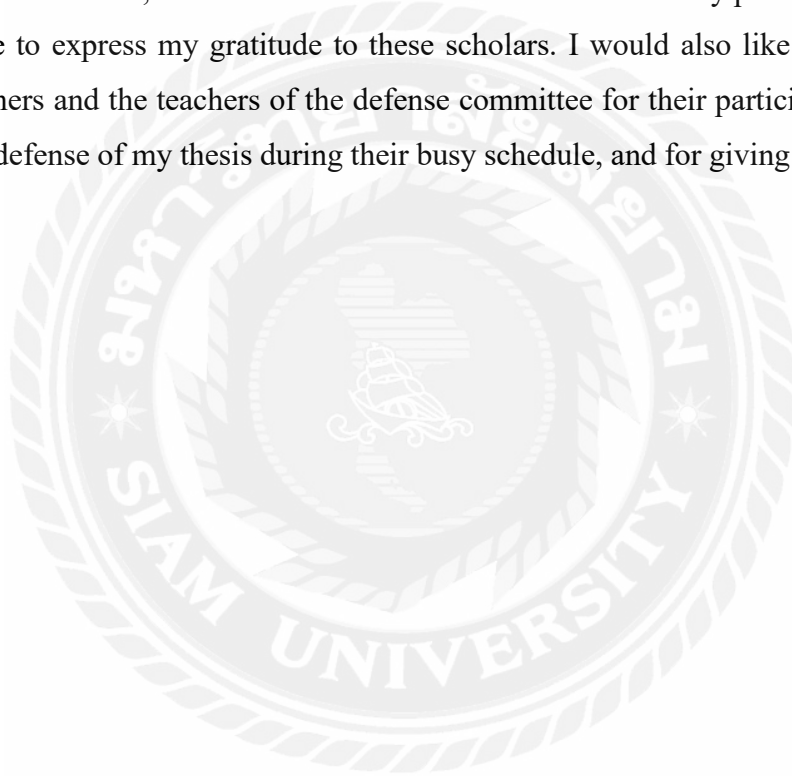
Keywords: sustainable growth, Internet enterprise, financial performance, quantitative analysis, business growth



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Huang Jing



Declaration

I, Huang Jing, hereby certify that the work embodied in this independent study entitled “Research on the key Financial Performance affecting the sustainable growth of Internet enterprises -- taking PDD Holdings Inc. as an example” is result of original research and has not been submitted for a higher degree to any other university or institution.

黃晶



(Huang Jing)
May 19, 2023

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Chapter 1 Introduction

1.1 Background of the Study

Growth is the instinctive demand of enterprise development, and it is a strategic management problem in the operation. Excessive growth will make the enterprise cash shortage, financial resources and capabilities can not keep up with the business development speed, resulting in the crisis of capital flow fracture; too slow growth will make the enterprise resources idle, create less value, may be eliminated by the market or acquired by other enterprises. Therefore, how to determine an appropriate growth rate, to ensure that the enterprise can make full use of financial resources, this is the problem that management managers need to consider. Sustainable growth is a type of stable growth that can measure whether the growth rate of an enterprise matches its financial resources and capabilities, thus preventing the enterprise from falling into the growth trap. Nowadays, the Internet industry has become a basic component of the national economic structure of various countries at the present stage, playing an important role in adjusting the traditional industrial structure and promoting economic growth (Zhao et al, 2021).

In 2018, the scale of China's digital economy was 31.3 trillion yuan, accounting for 34.8% of GDP; as of March 2020, the total number of Internet users has reached 904 million, and the Internet penetration rate has reached 64.5%. A total of 710 million online shopping users, the utilization rate is 78.6%; the total scale of network video users is 805 million, the utilization rate of 94.1%, with the continuous development and progress of the Internet, Internet companies have obtained a good development environment, the connection between enterprises deepening, listed Internet companies, restructuring and merger between enterprises (Esterhuysen & Wingard, 2016), Vipshop, iQiyi, spelling and more companies listed in the United States, day boat culture listed in domestic A-shares, etc. According to statistics, China's Internet business revenue continued to grow in 2017, and Internet enterprises created 710.1 billion yuan of business revenue, an increase of 20.8% compared with the business revenue of 587.8 billion yuan in 2016 (Al-Zaqeba et al, 2022). Compared with the growth rate of 5% -10% in other large traditional industries, it is undeniable that the Internet industry has achieved rapid growth.

However, in the background of such rapid development of the industry, many Internet enterprises, in order to seize market share, blindly adopt expansion strategies, overestimate their financial ability, and ignore the mutual match between growth and financial resources, so that enterprises fall into financial difficulties or are acquired. In fact, there are many business failures or financial crises in the Internet industry every year. For example, in 2010, founder Liu Qiangdong was forced to leave due to the rupture of Jingdong capital chain; in 2011, Baidu faced great financial pressure and its stock price was depressed; in 2013, netease was reported poor profit, and the stock price also plummeted; in 2014, due to the severe review of the capital market in the United States, Baidu had to consider selling its real estate business and e-commerce

business to ease the problem of the capital chain tension. In the second half of 2014, Alibaba Group announced its acquisition of Ele. me and Koubei for about \$10 billion. In the following two months, Alibaba shares fell by more than 20% in three trading days (Zhao et al, 2021). The "wave of closures" of the Internet industry starting in 2015 is even more shocking. In January 2017, only 213 group buying websites in China could operate normally (Moussié & Alfery, 2022). In the past few years, LeEco, which has risen by the daily limit of the stock and is in the forefront of the Internet industry, has achieved diversified development in seven years. However, due to the hasty implementation of the strategy, enterprise operation problems and the capital chain rupture. In the early stage of their establishment, the business growth rate of these enterprises can reach about 30%. In the later stage, due to the immature profit model, excessive cost investment or inadequate financing, the capital flow is broken and the enterprise does not achieve sustainable growth.

It can be seen that the sustainable growth status of the Internet industry is not optimistic, and the financial resources and capabilities of enterprises do not match the rapid growth of their business. Due to many problems existing in the early stage of the development of the industry, enterprises face many problems such as profit difficulties and financing difficulties. In order to solve the above problems and maintain the industry sustainable and healthy development, this paper will be from the financial performance of the Internet industry profitability, debt risk, development ability and business growth, the four aspects of analysis, put forward relevant measures to help the Internet companies in the case of fierce competition and complex market environment to determine the appropriate growth rate and develop appropriate growth strategy, promote the level of capital returns, the correct management behavior, to promote the Internet industry to achieve sustainable development.

1.2 Problem of the Study

On the one hand, under the background of such rapid development of the industry, many Internet enterprises, in order to seize market share, blindly adopt expansion strategies, overestimate their financial ability, and ignore the mutual match between growth and financial resources, so that enterprises fall into financial difficulties. Kleine (2009) used 1,676 listed companies in the United States from 25 countries as samples to test whether the overseas listing is associated with long-term performance. The study concludes that most overseas listed companies can only obtain value sometimes. Kang(2013) used the sample analysis method to empirically study the impact of overseas listing on the growth of companies. The research results showed that the growth of external financing support deteriorated after the overseas listing of enterprises. Kušter (2022) mentioned that when mergers and acquisitions frequently occur in the capital market, some Internet enterprises may also face the risk of being acquired, but for their consideration, they will also integrate the financial resources of the acquired parties for their operation and development. In recent years, there has been researched on overseas listed companies' business performance. Thus, in the context of the whole industry growth slowdown, Internet companies want to be in the increasingly fierce competition for survival and development and even

prominent group, so need is not just to update and explore new development directions, business models, more in need of the Internet enterprise managers can clear its enterprise itself in their industry position, performance status and with other competitors in all aspects of ability level. That is, how enterprises make full use of strengths and circumvent weaknesses in financial performance can still flourish in the context of the slowdown of industry growth.

On the other hand, current China Internet companies research content is more mainly focused on the enterprise listed for overseas reasons, etc. However, the Internet enterprise sustainable growth literature is more than just literature mainly concentrated on the Internet industry of a business area or an Internet company. From the perspective of enterprise management or economics research, lack of sustainable growth of the whole Internet industry empirical research (Salinah, 2016). With the rapid development of the Internet industry, groups of excellent Internet enterprises have emerged, and scholars are increasingly inclined to take Internet enterprises as the research object for research. Heeks (2010) studies the sustainable growth and influencing factors of traditional industries, which can comprehensively reflect the financial situation of enterprises in a certain period and help managers to find the problems existing in the growth. Sustainable growth research has become essential research for an industry or enterprise to a particular stage of development. So, this paper will explore the profitability, debt risk, development ability and business growth, the four factors of Internet companies' financial performance evaluation of sustainable growth, whether there is a significant impact, and spell as the research object, based on the collected second-hand data for empirical analysis, through quantitative research results to point out and correct the problems existing in the growth, Suggestions, help like spell many Internet companies can achieve sustainable growth.

1.3 Research Questions

For effective asset management, enterprises need: an adequate information base that should be sufficient and reliable for thorough analysis for the purpose of managerial influence; development ability in business growth analysis; cash flow capacity in asset quality analysis; provision of common methodological principles for the organization and accounting of certain components of assets, liabilities and capital, which makes the comparison of the database of information; the effectiveness of management decisions provides transparency of the information base, which becomes of particular importance during periods of economic crisis, corruption and instability of the econ-om (Tanklevska & Miroshnichenko, 2019).Based on this fact, the research question in this study expands into four questions:

Q1: Does the profitability under the traditional financial performance evaluation index have a certain impact on the sustainable growth of Internet enterprises?

Q2: Does the cash solvency on the solvency risk analysis of the traditional financial performance evaluation index have a certain impact on the sustainable growth of Internet enterprises?

Q3: Does the development ability on the sustainable growth of Internet

enterprises under the traditional financial performance evaluation index have a certain impact on the sustainable growth of Internet enterprises?

Q4: Does the cash flow ability under the asset quality analysis of traditional financial performance evaluation indicators have a certain impact on the sustainable growth of Internet enterprises?

1.4 Objectives of the Study

After all, current Internet enterprises need a clearer understanding of their financial situation, either overestimate their financial ability and blindly seek rapid growth, resulting in financial resource tension, or lack competitive advantage and slow growth rate, resulting in idle or acquired resources. Establishing the appropriate growth rate can not only balance the financial resources of the enterprise, but also realize the enterprise's long-term development (Habek & Wolniak, 2015). Through this paper can study the current spell of Internet enterprise operating efficiency and financial situation to make a judgment, judge the current Internet enterprise sustainable growth status, get more assets and capital, to expand the scale of the enterprise better, improve the success, and after the spelling of their financial resources and growth between matching, to determine the appropriate growth rate for the enterprise to provide some reference.

1. To determine the existing financial profitability of Pinduoduo Internet enterprises financial performance evaluation sustainable growth.

2. To find out the sustainable growth of the existing debt risk of Pinduoduo Internet enterprises.

3. To ascertain the existing financial development ability of pinduoduo Internet enterprises financial performance evaluation sustainable growth.

4. To settle the existing cash flow capacity of Pinduoduo Internet enterprises financial performance evaluation sustainable growth.

1.5 Significant of the Study

Based on the above background, this paper combines the academic research results (Bocola & DAVIS, 2019). Therefore, this paper will elaborate on the significance of this study from both theoretical and practical aspects.

1.5.1 Theoretical significance

In recent years, Chinese scholars at home and abroad have increasingly studied the problem of sustainable growth of enterprises. From the definition of sustainable growth, the sustainable growth of an enterprise refers to the expansion of the future business scale of the enterprise on the premise of keeping the existing resource investment unchanged. From the perspective of financial performance, Hosman (2011) conducts research from two aspects: on the one hand, from the perspective of enterprise performance, it mainly studies the relationship between financial indicators, corporate governance and sustainable growth; on the other hand, from the perspective of financial risk, Mucai et al (2014) mainly study the relationship between debt capital structure,

stock issuance scale, equity concentration and sustainable growth. A sustainable growth rate is a comprehensive financial index that can more comprehensively reflect an enterprise's operating efficiency and financial situation. Therefore, this study is based on the resource-based theory as the leading theory, analyzes Pinduoduo Internet enterprises from four aspects of quantitative evaluation of financial performance, points out the financial problems existing in the growth of enterprises, and complements the lack of theoretical research.

1.5.2 Practical significance

For Internet enterprises, there is a more reasonable enterprise valuation that can let enterprises find out the problems existing in their development and timely adjust their development strategies according to the problems so that enterprises can embark on a more reasonable development path in the future (Chen, 2022). For the Internet industry, an accurate valuation of Internet enterprises can make the industry environment healthier and promote the development of the whole capital market; the valuation of Internet enterprises can support stock pricing and enterprise investment; for investors, an accurate valuation of Internet enterprises can make investors understand the investment value of the enterprise, and consider more carefully when making investment decisions to avoid investment loss.

Driven by the current trend of the global economy, cross-border equity financing has developed rapidly, and most of the small and medium-sized enterprises in China have also begun to choose to list in other regions. The motivation behind it is worth exploring. In particular, by studying the financial accounting management of the listing of Internet enterprises such as Pinduoduo, we find out the problems and put forward the corresponding measures and methods to make the enterprises listed smoothly and achieve sustainable development.

First, to enhance the core competitiveness of pinduoduo Internet enterprises. In this paper through the spell of Internet companies for case, can from the perspective of financial performance, a more comprehensive understanding of the company's business situation, financial accounting problems and existing risks, find out the problems, improve the financial management, core competitiveness guarantee the benign development of the company, and through a series of analysis of related enlightenment.

Second, it helps the majority of investors to make more optimized investment decisions. The financial performance analysis and evaluation based on the financial reports disclosed by the research object can help the majority of investors to more intuitively understand the financial situation of the invested company's profit and cash flow, analyze its development trend and investment prospects, and help them to make more optimized investment decisions.

Third, it can provide a reference for the financial performance management of other Internet enterprises (Zhou, 2022). After all, the Internet industry has the characteristics of a low entry threshold, high return on investment and fast development, so it is bound to attract the influx of a large number of market funds and talents. However, due to its late development compared with the traditional industry

could be better, various problems will inevitably arise in its development process (Zhou & Zeng, 2022). Only scientific and effective financial performance evaluation can ensure enterprises' benign development, attract more market funds and talents, and improve the efficiency of social resource allocation. So this paper discusses the spell of Internet companies from macro perspective, existing conditions and basic situation, and then from the micro perspective of profitability, solvency, development ability and cash flow ability, financial performance evaluation quantitative analysis, scientific evaluation in the process of listing risks, and the existing factors, ensure the financial management standard, financial performance evaluation for the entire Internet industry into more meaningful, lay the foundation for the optimization of financial accounting management.

1.6 Limitation of the Study

In order to better evaluate companies such as the Internet, we need to continue to study the subject. This study has the following limitations:

First, this paper to case company information is limited, can not get too much spell company internal data, calculation results will produce an inevitable error, and this article only selected the case a potential profit of the company to evaluate, the limitation of index leakage or wrong, and these problems will have a certain influence on the correction coefficient, also affects the actual reliability of the correction results. Therefore, developing a set of more scientific and reasonable index selection methods is necessary, and the accuracy problem needs to be improved.

Second, when calculating the value correction coefficient, the relative weight of the index is determined by expert scoring and software analysis, and then the score is determined by the set scoring standard. The scoring standard of financial indicators is relatively fixed, which can take the traditional value of enterprise performance evaluation as a reference (Zhang et al, 2022). However, when the non-financial factors are involved, because the non-financial factors are kept from the financial report, the obtained data is only carried out in the form of the website, resulting in the company investigation could not get more objective and true data. Future research can start with how to avoid the subjectivity of weight determination and scoring and improve the objectivity of the value evaluation of Internet enterprises.

Chapter 2 Literatures Review

2.1 Introduction

Current Chinese research on sustainable industry growth is mainly concentrated in the real estate industry, construction, manufacturing, auto industry and other large mature traditional industry because of the rapid growth of the Internet industry research. Therefore, studying the Internet industry's sustainable growth enriches the Chinese industry's sustainable growth theory research results. In addition, in recent years, the financial research on Internet enterprises in China mainly focuses on profitability, operational efficiency, the financial risk of mergers and acquisitions, etc. There are few studies on their sustainable growth rate. A sustainable growth rate is a comprehensive financial index that can fully reflect an enterprise's financial situation. The research conducts the sustainable research of Internet enterprises through CNKI, Google Scholar, Research Gate and other resource websites, which provide some ideas for the follow-up in-depth financial research of Internet enterprises, and also fill in the shortcomings of the research results of Internet enterprises in this aspect.

2.2 Related Research and Concept Definition

2.2.1 Internet enterprise literature

The Internet industry is a strategic emerging industry in China. It plays a massive role in adjusting the traditional industrial structure and transforming the economic and commercial form and is a vital force in promoting economic growth (Zeng, 2020). Since China was officially connected to the Internet in 1994, after more than 20 years of development, the Internet has wholly penetrated China's social life. With the explosive growth of China's Internet users, Internet infrastructure and the rapid development of Internet technology, the Internet industry has covered the information service, online games, network video, e-commerce, online travel, Internet companies sustainable growth and other major Internet business; the industry has emerged a batch of like Alibaba, Netease, Tencent, Baidu and other excellent Internet companies. In the government work report on March 5, 2015, Premier Li Keqiang put forward the concept of "Internet +" for the first time, integrating the Internet with traditional industries, which brought new profit growth points for developing Internet enterprises (Zhou & Zeng, 2022).

According to statistics, China's Internet business revenue continued to grow in 2017, and Internet enterprises above the designated size created 710.1 billion yuan of business revenue, an increase of 20.8% over the business revenue of 587.8 billion yuan in 2016. Compared with the growth rate of 5% -10% in other large traditional industries, it is undeniable that the Internet industry has achieved rapid growth. And after nearly fifty years of development, the Internet enterprise sustainable growth has established in western countries relatively perfect system, Chen (2022) pointed out that the rapid development of Internet information technology let us in an era of big data and introduces human life a quantitative dimension, at the same time it is also the

power source for the development of things, Internet information technology penetration into the financial sector will cause great change and development of the financial industry. Zhou and Zeng (2022) believe that with the continuous development of mobile Internet, the existing extensive data framework is facing tremendous changes; he believes that SO (social), LO (scene) and MO (mobile) elements are gradually integrated into the operational data. Therefore, in the new situation, Internet enterprises should give full consideration to the expansion of customers and the mining of customer resources.

Wielki (2020) Deeply studied the organization and role composition to succeed in the big data field. This requires Internet enterprises to adapt to the development of big data; otherwise it will lead to a large number of customer losses. Zhang et al (2022) reveal ten new rules of the game for economical operation under the influence of the Internet. This requires Internet enterprises to follow the new rules of the game in the era of sustainable growth of Internet enterprises in order to achieve further development. The deep integration of the Internet and finance has profoundly impacted the products, business and organization of the financial industry (Zhang, 2020). The People's Bank of China defines the sustainable growth of Internet enterprises as a new financial business model in which traditional financial institutions and Internet enterprises use Internet technology and information and communication technology to achieve financial financing, payment, investment and information intermediary services. Many scholars believe that the sustainable growth of Internet enterprises is the third financial financing mode different from the indirect financing of Internet enterprises and the direct financing in the capital market, which is a new form of financial business (Xie & Zou, 2012).

2.2.2 Financial performance literature

In 2003, based on the deep research and study of modern enterprise performance evaluation theory and practice showed that the future of the performance evaluation system lies in how to establish the relationship between non-financial factors and cash flow. In 2004, Munangi and Bongani (2020) took the characteristics of performance evaluation indicators as the research object and concluded that the characteristics of indicators affected the selection and evolution of indicators. Yu (2020) pointed out that in the manufacturing industry in a highly competitive environment, correct and appropriate financial evaluation is critical to reflect the enterprise's competitiveness. Hence, the introduction of financial performance based on enterprise value uses the hierarchical analysis method to determine the standard weight, and the manufacturing enterprise ranking; the results show that the method of enterprise ranking is consistent with the actual situation is more. Esterhuyse and Wingard (2016) evaluated the financial performance of Iranian automobile companies in the Tehran Stock Exchange, and built a hierarchical financial performance evaluation model based on accounting measures and economic value measurement. Finally, the six companies were ranked according to the proposed method. In 2015, Habek and Wolniak (2015) used financial accounting, EVA and monetization rate indicators to analyze the financial performance of Alibaba's mergers and acquisitions. Muhammad et al (2019) used the

entropy weight method to combine the weekly and monthly data of the four stock indexes to compare the degree of capital turbulence. Huang and Zhang (2021), from the macro perspective, the background of Internet companies listed abroad, listed location, listed plate, listed mode, financing and listing cost, etc., and on this basis, from the Internet companies listed on the market reaction, profitability, growth ability analysis of enterprise performance.

2.2.3 Sustainable Growth literature

The sustainable growth model laid a foundation for later scholars to study sustainable growth further. Many foreign scholars began to study the sustainable growth situation empirically and the influencing factors of a specific industry or a certain enterprise in combination with cases. Huang and Zhang (2021) adopted a combination of qualitative and quantitative research methods, used the financial data of ten years to analyze the financial factors affecting the sustainable growth of enterprises, and proposed a comprehensive evaluation system based on economic added value (EVA) to help listed enterprises achieve sustainable growth. Sun et al (2021) conducted an empirical study on the financial data of 325 real estate enterprises in the United States from 2004 to 2008, and found that the real estate enterprises in the United States basically did not achieve sustainable growth due to the impact of the financial crisis, showed a trend of insufficient growth. Deng et al (2022) believe that high-speed growth represents the adaptation of enterprises to the current market, indicating that the current operation of enterprises is successful. Through empirical analysis of a large number of high-speed growth enterprises, it is found that business practices, human resource management, enterprise nature and founder ability have an important role in the sustainable growth of enterprises. Chen (2022) took 8,405 producer enterprises in France as the research object and selected the data from 9 years from 1996 to 2004 for empirical research.

The analysis pointed out that the profit margin index has little impact on the sustainable growth of French-producing enterprises, and sustainable growth results from a combination of various factors. Zenios (2022) has established a set of value evaluation systems based on sustainable growth, which is used to study the sustainable growth of enterprises. The study found that the necessary return rate of the enterprise investment project is related to the investment risk, and the enterprise's profitability has the most significant impact on sustainable growth. Lima (2022) conducted a quantitative study on enterprises in Slovakia in 2014 and found that competitive intelligence and innovation capabilities had a positive significance on the sustainable growth of enterprises. They improved their competitive position in the market and increased their market share. Liu et al (2023) evaluate the financial performance of 6,190 small and medium-sized enterprises in Europe from 2000 to 2014, measuring the sustainable growth of enterprises by the ratio of revenue, profit, number of employees, added value per employee, assets, net income, operating income to operating expenses. Through analysis, it is found that there are significant differences between the financial performance of enterprises before and after

government subsidies, which is concluded that government subsidies can improve the financial performance of enterprises and promote sustainable growth of enterprises.

2.2.4 Research literature on the Sustainable Growth of Internet Enterprises

There are many research scopes on Internet enterprises. For example, Zhang et al (2018) divide the profit model of Internet enterprises into nine models according to the positioning of enterprises in the value network. Muhammad et al (2019), to study the factors affecting the sustainable development of the Internet community platform, it took the Google community, for example; the analysis of the strategy found that the user activity prompted some virtual community platforms, core competitiveness, share experience and crisis experience help community platform remain active, thus makes the platform to sustainable development. Sun et al (2021) analyzed the Internet software development industry development in Indonesia. They found that the Internet software development industry is developing rapidly and has high growth potential, but enterprises need more than rapid development. Motoc (2022), for failure and success of e-commerce enterprise research, found that the success of e-commerce enterprises has its unique business model. With successful electric business enterprise Amazon, for example, through the analysis, found that Amazon does not care about short-term interests, pays more attention to the future lasting earnings, enterprises constantly money into the business, increase technology research and development, to help enterprises occupy the dominant position in the industry, realize the sustainable development of the enterprise. In order to achieve a competitive advantage, enterprises must achieve sustainable growth.

In general, a considerable part of China's listed companies are state-owned enterprises and state-owned holding enterprises, and the development status of these enterprises is also realized under the guidance of national policies, government instructions and investor expectations. Liu et al(2023) studied the capital structure of large and small Internet enterprises in the United States. They analyzed the different operation modes of the capital of Facebook of American Internet enterprises. However, there are few studies on the sustainable growth of Internet enterprises, and the current literature studies the sustainable growth of a business field in the Internet industry. The research on sustainable growth has become necessary research for an industry or enterprise to a particular stage of development. It can comprehensively reflect the financial status of enterprises in a certain period and help managers to find the problems existing in growth. At the same time, sustainable growth, as a systematic concept, also provides some analytical ideas for the users of financial statements and as a preliminary idea of this research.

2.3 Theory of Reviews

2.3.1 Resource-base theory

The theory of resource foundation of enterprises explains that enterprises' performance and operation results are related to their various resources. Enterprise is the provider of resources, and enterprise resources can be divided into tangible resources and intangible resources. Tangible resources refer to the assets, equipment

and technologies owned by an enterprise, while intangible resources refer to the resources composed of employees, customers and knowledge that can bring profits. Heeks (2010) divides enterprise resources into fixed assets, plans and culture, which is any partially permanent (tangible or intangible) asset considered the advantage or disadvantage of a given enterprise at a given time. The tangible resources of an enterprise include assets, equipment and knowledge, while the intangible resources include human capital, information and organizational mode. Such intangible assets owned by an enterprise can directly impact its business activities. For example, human capital is the core competitiveness of an enterprise, while the information and organizational mode is its external expression form. For different types of enterprises, the impact degree of their intangible assets is different, which has an essential impact on the operation efficiency of enterprises. Bocola and Dervis (2019) believe that enterprise resources are the tangible resources (financial ability, physical resources, human resources, organizational resources) and intangible resources (information resources, innovation resources and reputation) in the production process of enterprises.

This paper holds that enterprise resources are tangible or intangible elements owned or controlled by an enterprise and impact the enterprise's strategy. Among them, tangible and intangible resources are the most important ones in enterprise resources. These two resources have a certain amount of stock in the enterprise, which is essential in enterprise's production and operation process. Fan and Feng (2021) define enterprise resources as "a stock of elements owned or controlled by an enterprise," including tradable proprietary technology (patents and licenses), financial or material assets (property rights, factories and equipment), human capital, etc. However, the two categories are different, depending on the question studied. For example, tangible assets: mainly refer to the various assets owned by the enterprise (such as plant, equipment, inventory, etc.) and the value brought by these assets; intangible assets: mainly refer to the intellectual property rights and technical knowledge owned or controlled by the enterprise; strategy: related to the external environment of the enterprise and creating a certain value (including tangible and intangible); cost management: refers to the specific amount of products in the market and the funds needed for the related production activities. Theoretically speaking, enterprise resources are both limited and infinite and impossible to own or control fully, so they must be obtained or controlled through various ways and means.

2.3.2 Growth theory

The research on sustainable growth can start from the growth theory. Although the term sustainable growth is not put forward at this stage, an idea has emerged: Enterprises should grasp the degree and coordinate various resources in the process of growth. Penrose (1959) is one of the scholars who studies the theory of enterprise growth. In her book *Enterprise Growth Theory*, she systematically discusses the mechanism of enterprise growth and the factors that limit the growth of enterprises. She believes that the growth of enterprises could be improved. What really restricts the growth of enterprises is not the external market, but the internal resources and

capabilities of the enterprise. The growth of enterprises is subject to the enterprise's management ability and management services. She believes that corporate growth is limited and that companies fall into the "mid-size trap" when resources are scarce. Sun et al (2021) believes that it is impossible for enterprises not to be affected by the external market in the development process, but if the enterprise does not make good use of the conditions of the external market and make itself a "small fish", then it will fall into the "medium-scale trap". She pointed out that sustainable enterprise growth can only be achieved by improving efficiency and coordinating various resources. In Zenios (2022) opinion, sustainable growth refers to the rational allocation and utilization of resources consistent with the enterprise development goals; in a high-level competitive market, the enterprise can achieve large growth at a lower cost; and more importantly, for the enterprise to effectively use resources, coordinate various resources and achieve better development than before. She believes that these three aspects of growth theory align with China's actual situation: internally, it can effectively solve the problem of insufficient market size; externally, sustainable growth can effectively solve the problem of insufficient development of enterprises.

On the basis of Pennes's growth theory, more and more scholars began to study growth from within the enterprise. Maris (2008) studies the growth theory from the perspective of internal efficiency. He believes that to maximize its internal efficiency, it must dig deep into its internal resources. The optimal growth rate of an enterprise is the growth rate that can maximize the internal efficiency of the enterprise. The enterprise can't achieve unlimited growth under the constraints of internal resources. This view is similar to Pennes's theory of growth. Motoc (2022) studies the growth theory from the perspective of enterprise life. He divided enterprises into economic enterprises and life-oriented enterprises. Economic enterprises focus on profit maximization and product manufacturing and service provision excessively.

In contrast, life-oriented enterprises pay more attention to the future survival and development of enterprises and focus on achieving sustainable growth. He believes that the company's resilience, internal cohesion, financial strategy and learning ability are the key factors that determine the longevity of the company. This view has similarities with China's national conditions. Starting from the enterprise growth theory, Mirza et al (2022) believe that the sustainable growth of the enterprise has a lot to do with the market size, product quality and marketing strategy. He believes that companies can adapt to changes in the external market by constantly improving product quality to ensure sustainable growth. When the quality reaches a certain level, the market size will remain the same, and enterprises cannot achieve large-scale growth in the market with high competition. However, the development of high technology makes enterprises have to pay attention to product design and brand building to improve themselves, so this way is not the form needed for the sustainable growth of enterprises.

2.3.3 Theory of financing structure

The theory research of financing structure began in the early 1950s, and the financing structure theory was divided into early financing structure theory and

developing financing structure theory according to the time sequence. He divided the traditional financing theory into three kinds: net income theory, business net income theory and traditional theory. The financing structure refers to the constituent structure of the financial system. The modern financial system includes the financial institution system of indirect financing with banks as the leading media, the financial market system of serving direct financing, and the financial regulatory institution system that implements supervision and management of the financial industry. Of course, there is more than one mode of financing structure. Enterprises adopt different financing methods with different financing structures, and different capital sources have different risks and costs, which also have different influences and constraints on enterprises. Ślusarczyk and Grondys (2019), the financially sustainable growth rate to financing theory, the Internet game companies-palm fun analysis of the financing structure of science and technology, found that the current enterprise growth faster, cash shortage, single financing structure, therefore, based on the sustainable financial growth target to optimize the financing structure, guarantee enterprise financing strategy can meet the needs of growth. Financing can help enterprises to obtain the funds needed for development and is an important financial activity to ensure the regular operation of enterprises.

For companies to achieve sustainable growth, they must have enough capital to power their growth. Due to the high operation risk of enterprises in the initial stage, the most critical financing method of most enterprises in the initial stage is venture capital or private equity. This financing method ranks at the end of the financing order theory, mainly because the financing cost is high and easy to disperse equity, which is easy to bring equity competition and affect the development of enterprises. Qiao and Wang (2021) pointed out that the Internet financial industry developing rapidly in recent years, with great changes in financial services, but many problems challenge the industry regulation, and disrupt the financial order, therefore, to promote sustainable development of the Internet financial industry, must return to financial essence, grasp the financial core, hit false financial innovation, truly safeguard the legitimate rights and interests of financial consumers. However, equity financing can introduce high-quality investors, improve enterprises' control structure, and supervise operators' behaviour to improve the efficiency of enterprise operation and management. From this point of view, equity financing has a promoting effect on the sustainable growth of enterprises.

2.4 Literatures Review

The term "sustainable growth" defines its connotation, and sustainable growth refers to a rational growth mode in which the economic growth rate of society should match and match the carrying capacity of the ecological environment and natural resources ecosystem to meet the needs of contemporary people without affecting the development of future generations. This is the first time to propose the connotation of sustainable growth from an economic perspective. From the economic perspective, sustainable growth is the harmonious development of the economy, society and natural environment and the unity of economic, social, and ecological benefits. Zhang

(2017), based on the background of "Internet +", uses the basic resources view (RBV) to build the sustainable development of electronic commerce enterprise system from the market perception, enterprise internal organization structure and product technology innovation three aspects of e-commerce enterprise sustainable development ability analysis, points out that the enterprise to fully coordinate internal and external resources, maintain the appropriate growth rate, to gain lasting competitive advantage. Suciu et al (2021) first calculate the sustainable growth rate through the Higgins model, then compares the actual growth rate and find the same change trend. Further analysis shows that Alibaba has strong profitability, but the financial risk is increasing, and the dividend distribution policy is unreasonable; then calculates the sustainable growth rate through the Cory model, and the calculation result is negative, indicating that Alibaba's investment is limited by cash flow, so Alibaba should consider cash flow when making an investment plan.

Subsequently, with the increasing number of failed enterprises, this connotation was introduced into the financial management of enterprises. From the perspective of financial management, sustainable growth refers to a reasonable growth mode in which the growth rate of an enterprise should be consistent with its financial resources and financial ability to realise the enterprise's long-term development.

Specific: First, the combination with financial goals, such as Levytska et al (2020), in the analysis of the relationship between corporate financial goals and sustainable growth, pointed out that some financial goals and sustainable growth conflict. From the perspective of sustainable growth, the financial goals of enterprises should be diversified. Under the leadership of enterprise value maximization, sustainable financial growth should be used to maximise profit and shareholder value.

Second, combined with investment and financing research, such as Suciu et al (2021) sustainable growth theory of the rationality of equity financing of listed companies and before and after the equity financing capital use efficiency, the results show that the IPO, secondary shares and rights listed companies before and after the actual growth rate and sustainable growth rate without significant difference, and three forms of equity capital use efficiency is low.

The third is the research combined with financial risks. For example, Wang and Wang (2022) analyzed the reasons for the financial risks in the expansion of enterprises, based on the theory of sustainable growth, reminding enterprises to establish an awareness of risk prevention and rational growth to ensure the long-term development of enterprises.

The fourth is to combine the research with financial strategy. For example, Tzovas (2006) uses different financial indicators to express the financing, investment, and distribution strategies of enterprises respectively, uses factor analysis to divide enterprises into high-quality and inferior enterprises, and determines whether the financial strategy affects the sustainable growth of different enterprises through testing.

On the other hand, in the era of rapid global Internet development, Chinese Internet companies have become the backbone of China's economic growth. In order to make Chinese Internet companies better participate in global competition, and

improve the need for innovation, this paper to the Internet industry as a research object; reason is that with the advent of the era of the Internet and big data, the Internet industry development prospects and application scope will be more and more widely, the Internet industry in the total GDP proportion is gradually increasing.

TABLE 2-1 Main financial data of Pinduoduo cash Flow statement

Project	Unit: 100 million yuan			
	In 2016,	In 2017,	In 2018,	In 2019,
Accounts payable and notes	10.92	87.22	74.37	126.5
Deposit and restricted cash	2.195	15.59	24.10	36.53
Net cash flow generated from operating activities	8.798	96.86	77.68	148.2
Purchase and construction of intangible assets and other assets	-3.200	-13.93	-77.01	-526.7
Disposal of intangible assets and other assets	0.300	16.33	0.550	248.0
Net cash flow generated from investment activities	-3.073	0.7165	-75.49	-283.2
Issue shares	5.119	14.47	177.0	81.95
Floataction of loan	--	--	--	70.73
Net cash flow generated from financing activities	4.865	13.99	173.4	158.5
Increase (decrease) in cash and cash equivalents	10.79	111.1	181.1	28.06
Closing balance of cash and cash equivalents	13.20	124.3	305.4	333.5

Source: Pinduoduo company 2016-2019 annual report

Table 2-1 is the main financial data of the cash flow statement compiled according to the annual report from 2016 to 2019. In the financial report, the cash and cash equivalents increased from 2016 to 2019 was 1.079 billion, 11.11 billion, 18.11 billion and 2.806 billion, which fluctuated greatly, but the overall upward trend. The net cash flow generated by operating activities is positive, the net cash flow generated by investment activities is negative, and the net cash flow generated by financing activities is positive. It can be judged that Pinduoduo is now in a period of rapid development, and its ability to resist risks, solvency and payment ability are all strengthened. The cash generated by Pinduoduo's operating activities of Pinduoduo is positive due to the large number of precipitation funds formed by the platform of Pinduoduo, which makes the cash flow of operating activities positive when the net profit is a loss. Analyzing investment activities and combining with the data of Pinduoduo, it is found that the intangible assets and other assets purchased, built and disposed of are all short-term investments used for term deposits and financial products, with strong liquidity and can ensure sufficient cash flow. In the financing activities, from 2016 to 2018, but in 2019, Pinduoduo issued 7 billion yuan of convertible bonds for "blood transfusion" for enterprises. At that time, Pinduoduo said

that the funds would be mainly used for platform research and development and the construction of new agricultural infrastructure.

Therefore, this paper studies the sustainable growth of Internet enterprises from the financial perspective and, on this basis, studies the financial performance that affects the sustainable growth of Internet enterprises. Therefore, it can be said that the innovation point is (1) At present, the empirical research objects on sustainable growth are mainly concentrated in the real estate industry, construction industry, pharmaceutical industry, automobile industry, manufacturing industry and other large traditional industries or all a-share listed enterprises, and there are few studies on the sustainable growth of the current rapidly growing Internet enterprises. Therefore, this paper selects Internet enterprises as the research object, and it is innovative to quantitatively study their sustainable growth and influencing factors from the financial perspective. (2) in the analysis of influencing factors, this paper, through factor analysis explores the influence of Internet enterprise sustainable growth key financial performance indicators: profitability, debt risk, development ability and business growth of Internet enterprise financial performance evaluation, the results of the factor analysis not only certain analysis but also to extract the factors reflects the financial ability of the detailed analysis, deeply analyze the problems in the growth, the countermeasures and suggestions for the study.

2.5 Conceptual Framework

This paper focuses on studying the key financial performance of the sustainable growth of Internet enterprises from a financial perspective. After sorting out the literature review and related theories, this paper studies the sustainable growth status of Internet enterprises on the whole, and then takes Pinduoduo Internet enterprises as the research object, mainly using the financial aspects to carry out empirical research.

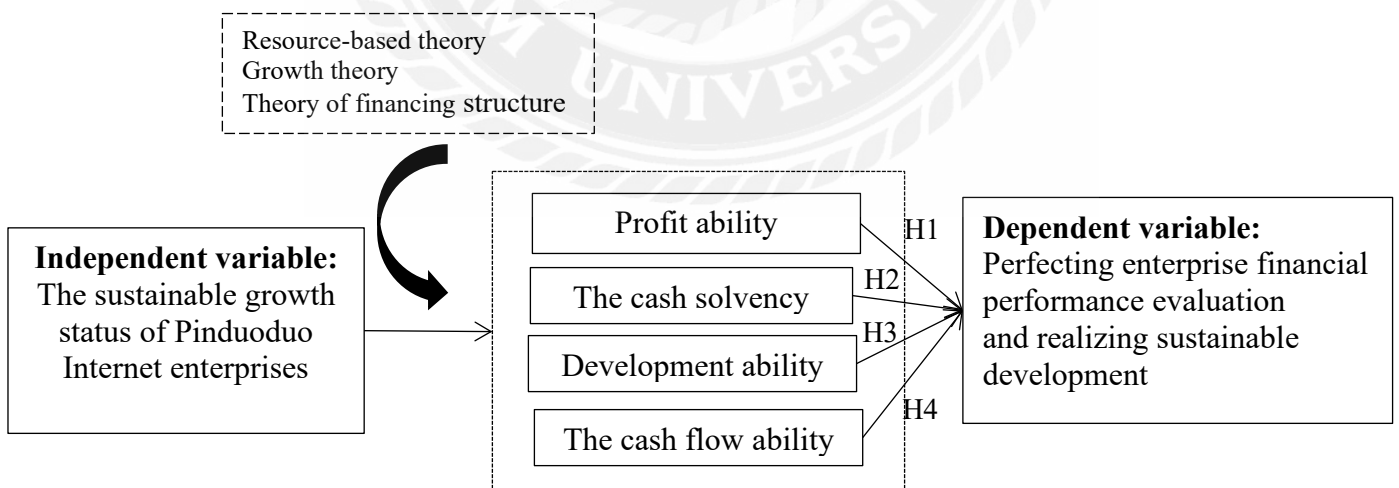


FIGURE 2-1 The model framework

Based on the discussion of whether the quantitative analysis model has resource based theory, growth theory, and financing structure theory, this paper extends it through the independent variable is the sustainable growth status of Pinduoduo Internet

enterprises, influencing variable:1)Profit ability.2)The cash solvency.3) The development ability.4)The cash flow ability. Analyze the impact of cash flow on dependent variables: Analyze the impact of business growth on the sustainable development of Internet companies under traditional financial performance.

2.6 Terms and Definition Used in This Study

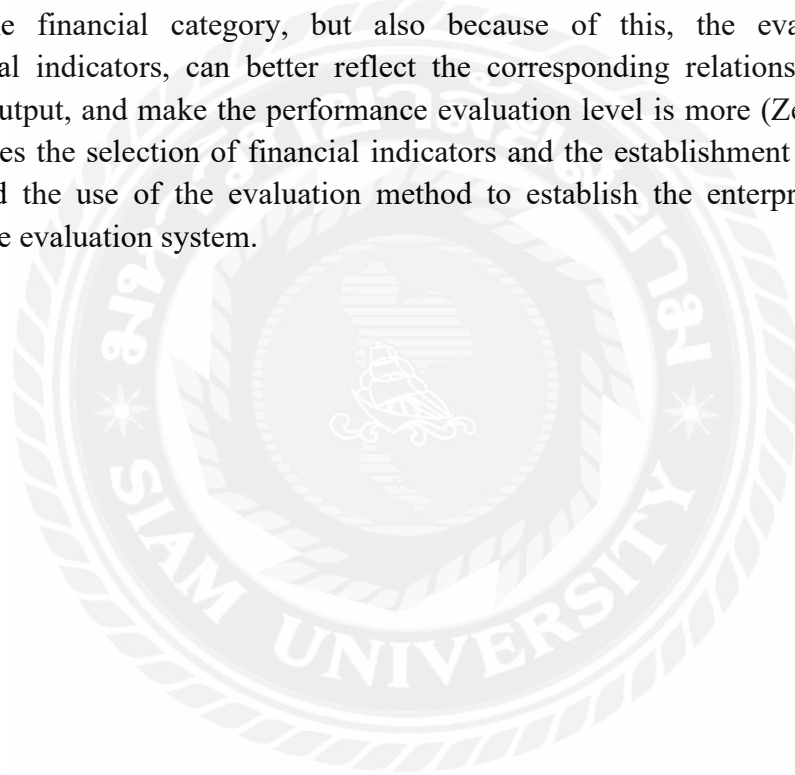
Sustainable growth rate: Sustainable growth rate is a comprehensive index, which integrates the operating performance, capital structure and dividend distribution policy of an enterprise into a system to comprehensively reflect the operating results of an enterprise. There are many factors that can affect sustainable growth, both financial and non-financial factors. James van horn is another study of sustainable growth rate, he thinks the sustainable growth rate is the target value, can be used to predict and afterwards, based on the enterprise financial policy changes, van horn extended model, the model is divided into static model and dynamic model (Mirowski & Van-Horn, 2005).

Enterprise value:In the era of service economy and the Internet, the diversified needs of users and the fierce market competition have promoted the accelerated renewal of products and the shorter cycle (Deng et al, 2022). Enterprise value comes from users, which is analyzed from the perspective of demand, and demand determines supply. Only after meeting the demand of customers, enterprises can produce and operate and realize value transfer. In the history of western economics, the utility theory of value is popular. There are subjective and objective differences in the criteria by which people measure value. Objective value is based on the product or the service itself, which is its intrinsic value. Subjective value is that the commodity itself has no value, and people's needs directly produce value. The subjective value and objective value of all products will have an impact on the value judgment of customers. In the era of Internet economy, the proportion of subjective value is gradually increasing, that is, the value is determined by customers. Customers take experience as the basis of value realization, and the subjective feelings of customers become the main source of enterprise value.

Influencing factors: influencing factors refer to the reasons or conditions that determine the success or failure of things. Learning advanced experience is one of the important factors to improve production. Research on the industry influencing factors, such as Kang (2013), based on the Higgins model, conducts research on the factors affecting the sustainable growth ability of the listed agricultural enterprises. In this study, factor analysis was used to extract five common factors, and constructed a regression model of sustainable growth rate and factor by regression analysis to explore the influence of different factors on sustainable growth ability. Zenios (2022) used the Higgins model to calculate the sustainable growth rate, and used descriptive statistics, Wilcoxon signed-rank test, factor analysis and regression analysis to conduct empirical research on the financial sustainable growth and influencing factors of listed enterprises in new materials.

Financial performance evaluation: the operating results of an enterprise in a

certain period of financial management reflect the financial performance of the enterprise. In financial management, this indicator summarizes the ability of the four aspects of debt repayment, operation, profit and development. Aswar & Saidin (2018) used the method of multivariate statistical analysis, used different research objects as samples from different angles to study, further improve the financial performance evaluation theory, so as to explore the related factors affecting enterprise performance, and put forward corresponding countermeasures. Financial performance measures of differentiation enterprise financial performance evaluation is based on the company's financial indicators, comparative analysis and scientific and appropriate evaluation method, financial performance evaluation can stand in a more objective perspective to help investors to judge the overall level of enterprise financial situation, the risk to reveal the size and the enterprise growth space in the future. Financial performance evaluation, of course, has certain limitations, because it will performance evaluation only in the financial category, but also because of this, the evaluation and non-financial indicators, can better reflect the corresponding relationship between input and output, and make the performance evaluation level is more (Zenios, 2022). This involves the selection of financial indicators and the establishment of the index system, and the use of the evaluation method to establish the enterprise financial performance evaluation system.



Chapter 3 Research Methodology

3.1 Research method in this paper

This study used a mixed analysis method, mainly applying quantitative analysis and literature analysis methods to the entire discussion in Chapters 3 and 4, and this paper analyzes the financial statements 2019-2023, using the quantitative research method to test and evaluate whether the Internet enterprises achieve sustainable growth, using the factor analysis method to explore the key financial factors affecting the sustainable growth of the Internet enterprises, and identify the problems in the sustainable growth financial strategy based on the research results. The first part is the introduction. This part mainly introduces the research background and significance of the paper to comb and comment; The second part is a theoretical overview, lay the theoretical foundation for the empirical study of the following article; The third part is the analysis of the current situation and research method and ideas of the sustainable growth of Internet enterprises (Zenios, 2022); Then from the financial perspective of the overall research of the current situation of sustainable growth of Internet enterprises and the sustainable growth of Internet enterprises are not objective reasons; The fourth part is an empirical analysis of the sustainable growth of Internet enterprises, mainly to study the key financial factors affecting the sustainable growth of Internet companies, and further analysis of each influence factors; The fifth part is to summarize the research results of the paper, the conclusion of the study, and put forward the countermeasures and suggestions for the sustainable growth ability of Internet enterprises.

Quantitative research methods

This study used the method of quantitative study, and after determining the sample data, the data analysis and study were completed using the SPSS software. This paper to spell as the research object, using the financial perspective of the spelling of Internet enterprise sustainable growth and its influencing factors for empirical research, using the validity and empirical analysis of the difference between the actual growth rate and sustainable growth rate, to judge whether the enterprise sustainable growth from the perspective of management and assets to explore the key financial factors and influence degree, finally get the empirical research results.

Literature research method

Through relevant literature review, it is not difficult to find that at present, foreign research on enterprise financial performance has a long history (Mirowski & Van-Horn, 2005). For the study of the western capitalist countries for the enterprise financial accounting, can be summarized as now the enterprise financial performance evaluation has become an important part of enterprise financial accounting daily management, and produced a lot of method theory and fruitful research results. So the research based on consulting and analysis of the relevant research, and collect the

spell of related data, financial statements, news materials and related journals, mainly in "Internet enterprise sustainable growth" and "Internet enterprise financial performance" as the keyword summary and organization, further determine the research direction of this paper.

3.2 Research Design Study design

Although there are rich research results on sustainable growth at home and abroad, the further review shows that there are still areas for in-depth research:

1. The research objects of empirical analysis of sustainable growth and influencing factors at home and abroad are mainly concentrated in real estate, construction, automobile, manufacturing, and other large traditional industries. There are few studies on the current rapidly growing Internet industry.

2. The research objectives for the sustainable growth of Internet enterprises are mainly aimed at a certain business field or an Internet enterprise in the Internet industry, such as e-commerce, Internet finance, Internet games, etc., and there is a lack of research on the sustainable growth of the entire Internet industry.

3. The research on the sustainable growth and influencing factors of Internet enterprises are mainly from the perspective of enterprise management or economics. The research methods are mainly standardized research and the lack of empirical research from the finance perspective.

Driven by Internet technology, Internet enterprises develop rapidly, but the number of bankrupt enterprises is also large, the rapid growth does not necessarily represent sustainable growth (Albu & Albu, 2021). In addition, due to the characteristics of Internet enterprises, the research results for sustainable growth of other industries are not necessarily applicable to the Internet industry. In addition, in recent years, the research on Internet enterprises mainly focuses on profitability, operational efficiency, the financial risk of mergers and acquisitions, etc. There are few studies on their comprehensive financial sustainable growth rate, and the existing literature is only qualitative analysis from the management or economics perspective. Therefore, based on the current research status, this paper conducts an in-depth study on the sustainable growth and influencing factors of Internet enterprises from the financial perspective, enriches the research results of the industry's sustainable growth, and provides a specific reference for Internet enterprises to formulate financial strategies.

3.3 Hypothesis

H1: Profitability under the traditional financial performance evaluation index has a significant impact on the sustainable growth of Internet enterprises.

H2: In the debt repayment risk analysis under the traditional financial performance evaluation index, the cash solvency has a significant impact on the sustainable growth of Internet enterprises

H3: The development ability in the business growth analysis under the traditional financial performance evaluation index has a significant impact on the sustainable

growth of Internet enterprises.

H4: The cash flow ability in the asset quality analysis under the traditional financial performance evaluation index has a significant impact on the sustainable growth of Internet enterprises.

3.4 Study Subjects and Sampling

The data in this paper is based on the fact that the Internet industry is a disruptive industry, and Internet products are mainly intangible products with high added value. These products are vulnerable to the market environment and consumer demand and are updated and iterated quickly (Debreceeny et al, 2002). To study why Internet enterprises fail to achieve sustainable growth, the influence of financial performance evaluation factors is one of them. Therefore, combining the assets and operations of Pinduoduo Internet enterprises as the scope of this research, the financial statements of 2019-2023 were collected as samples for research.

3.5 Sample Size

In order to ensure the accuracy of the empirical analysis, this paper screens the collected financial data of Pinduoduo Internet enterprises from 2010 to 2023:

(1) Excluding the data of ST, * ST and abnormal fluctuations in operating performance;

(2) Years with more missing data were excluded;

Finally, a total of four years from 2019 to 2023 was selected as the analysis period, which also avoids the interference of random factors to the results.

3.6 Financial Performance Evaluation Indicators Collection

On July 26, 2018, Beijing time, Pinduoduo was listed in Shanghai and New York, officially listed; the stock code is PDD, its issue price was \$19, the opening price was \$26.5, up nearly 40% from the issue price of \$19, the market value once approached \$34 billion, becoming the first company to ring the bell in both places in China (Ma et al, 2021). In the past 12 months ending June 30, 2018, active consumers on the company's platform reached about 344 million, and active merchants exceeded 1 million. In 2017 and the first quarter of 2018, the number of orders on Pinduoduo mobile platform reached 4.3 billion and 1.7 billion, respectively (Deng et al, 2022). Therefore, this paper uses the CSMAR database and the official website to collect the financial indicators of Pinduoduo Internet enterprises and the financial statements from 2010 to 2023 to organize and calculate the financial indicators. This study uses Excel software and SPSS26.0 statistical software.

TABLE 3-1 Financial performance evaluation indicators

Level 1 indicators	Secondary indicators
Profitability	Rate of return on total assets

	Net profit from sales
	Gross profit margin
Debt paying ability	Total asset-liability ratio
	Turnover of total capital
Cash flow ability	Average accounts receivable turnover ratio
Development ability	Total asset growth rate

3.7 Data Analysis

First, the Z-value and Sig probability of significance was judged by non-parametric tests (Levytska et al, 2020). That is when there is a significant difference between the positive and negative rank sum and Sig. When the value is less than 0.05, and the absolute value of Z is greater than the critical value of 1.96 at the significance level of $\alpha = 0.05$, there is a significant difference between the sustainable growth rate and the actual growth rate, indicating that the enterprise has not achieved sustainable growth.

Secondly, the data reliability analysis can test whether the design variables are stable to reduce the unexpected impact of the samples on the experimental results, and the SPSS 26.0 statistical software will be used for quantitative analysis.

The above design provides sufficient theoretical and analytical ideas and lays a solid foundation for subsequent empirical research..

3.8 Reliability and validity analysis

3.8.1 Reliability analysis

Scholars often use reliability coefficients to represent the level of reliability of data or measurement tools. Krenbach's α is currently the most commonly used measure of reliability (Flora, 2020). As long as the α coefficient of Krenbach is above 0.7, its size and data can be considered. Validity was used as a criterion to test whether the selected scale could be used to measure variables and was considered as a KMO greater than 0.7 to be acceptable.

TABLE3-2 Reliability analysis

Item	CITC	Delete the Cronbach's Alpha value for the item
Profitability has a significant impact on the sustainable growth of the financial performance evaluation of Pinduoduo Internet enterprises.	0.863	0.873
The solvency has a significant impact on the	0.874	0.881
		0.883

sustainable growth of the financial performance

evaluation of Pinduoduo Internet enterprises.

The development ability has a significant impact on the sustainable growth of the financial performance evaluation of Pinduoduo Internet enterprises.

0.843 0.859

Cash flow ability has a significant impact on the sustainable growth of the financial performance evaluation of Pinduoduo Internet enterprises.

0.881 0.867

As can be seen from Table 3-2 above, the Cronbach Alpha value was 0.872, which is very consistent with the criteria. In addition, observe the variables and their potential variables between mostly bit between 0.6~0.8, in the spell of Internet enterprise existing assets keep enterprise innovation and competitiveness, promote the sustainable growth of Internet companies and in the spelling of Internet enterprise existing management factors sustainable growth keep enterprise innovation and competitiveness, promote the sustainable growth of Internet companies is in line with the actual situation, so the hypothesis and the collected data are effective.

3.8.2 Validity analysis

Validity refers to the degree to which the measuring tool or means can accurately measure the things to be measured (Kang, 2013). Validity refers to the extent to which the measured results reflect the content to be investigated, the more consistent the measured results are with the content to be investigated, the higher the validity, on the contrary, the lower the validity (Vysochan et al, 2021).

TABLE 3-3 Validity analysis results

name	Factor load factor					Common degree (common factor variance)
	factor 1	factor 2	factor 3	factor 4	factor 5	
Rate of return on total assets	0.712	0.19	0.072	0.287	-0.007	0.631
Net profit from sales	0.753	-0.014	0.267	0.001	0.122	0.653
Gross profit margin	0.797	0.058	0.067	-0.038	-0.014	0.644
Total asset-liability ratio	-0.17	0.094	0.567	-0.089	0.356	0.494
Turnover of total capital	0.13	0.121	0.506	0.655	-0.066	0.721
Average accounts receivable turnover ratio	0.14	0.897	0.156	-0.034	0.077	0.856
Total asset growth	0.299	0.188	0.749	0.162	0.078	0.718

rate						
Characteristic root value (before rotation)	3.636	1.933	1.33	1.249	1.074	-
% Variance interpretation rate (before rotation)	25.970%	13.808%	9.503%	8.921%	7.674%	-
% cumulative variance interpretation (before rotation)	25.970%	39.778%	49.281%	58.202%	65.876%	-
Characteristic root value (after rotation)	2.394	1.969	1.932	1.501	1.426	-
% Variance interpretation rate (after rotation)	17.101%	14.063%	13.802%	10.723%	10.187%	-
% cumulative variance interpretation (after rotation)	17.101%	31.164%	44.966%	55.690%	65.876%	-
KMO price \square			0.65			-
Bart spheroid value			454.921			-
Admidia						-
df \square			91			-
p price \square			0			-

Note: color in the table: blue indicates the absolute value of load coefficient greater than 0.4, red indicates the common degree (common factor variance) less than 0.4.

In conclusion, the reliability and validity of each data in this study met the standard requirements, indicating that the quality of this data is acceptable.

Chapter 4 Result of the Study

4.1 Introduction

The study mainly uses the quantitative analysis method for the empirical process because it can make complex economic problems become simple and intuitive, contribute to the establishment and improvement of the economic statistics index system, at the same time also to the complex economic phenomenon, detailed description, and use the advantage of auxiliary data information depends on quickly can obtain data information (Zenios, 2022). Nevertheless, is likely to have some detailed or not precise data, such as some enterprise financial report that is likely to appear sure water. The focus of this chapter is a detailed analysis of the data collected that meets the research criteria and tests the research questions and hypotheses presented in chapters II and III.

4.2 Description of statistical variables

After the listing, Pinduoduo's profit in 2021 exceeded expectations, with its revenue in 2021 increasing by 89% year on year and 14% lower than market expectations (Deng et al, 2022). Regardless of the weakness in the 1P business, advertising and commission revenue rose 73% year-over-year, exceeding our expectations. Adjusted net profit reached 4.1 billion yuan (adjusted net profit margin of 18%), exceeding the market-expected net loss of 2.8 billion yuan, mainly due to good marketing cost control. 2021 is -45% (-59% for 2021 and -75% for 2020), as shown in Table 4-1.

TABLE 4-1 Financial statements of Pinduoduo for 2019-2023

	2019	2020	2021	2022	2023 (estimated estimate)
Operating income (one million)	30,142	59,492	105,120	143,755	189,443
year-on-year growth (%)	130	97	77	37	32
Net income (one million)	-4,266	-2,965	-2,716	4,241	15,126
Earnings per share (RMB)	-3.69	-2.49	-2.23	3.42	11.96
Earnings per share change of (%)	not applicable	not applicable	not applicable	not applicable	250
The market has forecast earnings per share (RMB)	not applicable	not applicable	-4.54	1.05	10.03
P / E ratio (x)	not	not	not	186	53

	applicable	applicable	applicable		
Market-to-sales ratio (x)	25.5	12.9	7.3	5.4	4.1
dividend rate (%)	0	0	0	0	0
Return on equity: (%)	-28.3	-11.9	(20. 1)	-6.7	13

Then, table 4-2 presents a descriptive statistical analysis of sustainable growth rates versus real growth rates.

TABLE 4-2 Descriptive analysis table of sustainable growth rate and real growth rate

particular year	variable	N	minima (%)	maxima (%)	mean (%)	standard error
In 2019,	Sustainable growth rate	93	-53.41	96.35	13.45	0.2381
	actual rate of growth	93	-36.37	185.63	39.07	0.4167
In 2020,	Sustainable growth rate	93	-40.98	94.02	9.02	0.1826
	actual rate of growth	93	-61.95	226.97	40.88	0.5433
In 2021,	Sustainable growth rate	93	-30.47	150.00	10.82	0.2226
	actual rate of growth	93	-93.65	442.91	42.16	0.9255
In 2022,	Sustainable growth rate	93	-34.82	52.59	4.77	0.1584
	actual rate of growth	93	-89.73	335.08	32.76	0.6825
In 2023,	Sustainable growth rate	93	-33.73	452.59	5.87	0.2634
	actual rate of growth	93	-65.94	535.08	62.28	0.749

From Appendix A and Table 4-2, The difference between the maximum and the minimum of the natural growth rate in 2019-2023 is large, with Significant deviation from the mean value, After Pinduoduo, its operating income growth, and before the listing, there is a big difference, And that their accurate growth rates fluctuate far more than their sustainable growth rates, In particular, the greater volatility of the actual growth rate in 2020, This is because of the outbreak of COVID-19 in 2020, People have started buying from online, Belongs to the dividend period of the Internet policy. As a result, resulting in Pinduoduo, the business performance fluctuates wildly. Therefore, the analysis can preliminarily judge the significant difference between sustainable growth rate and real growth rate; that is, the above data shows that the existing operating factors have a certain impact on the sustainable growth of Pinduoduo Internet enterprises.

Then, profitability analysis selects three indicators: return on total assets, net profit on sales and gross profit margin to measure Pinduoduo's corporate income level

in the three years from 2019 to 2023. The return rate of total assets reflects the ability of the enterprise assets to obtain profits. The higher the index, the stronger the ability of the enterprise to obtain net income from its capital. The net interest rate on sales can be used to compare Pinduoduo's ability to generate sales revenue in a certain period, that is, the net profit of each unit of sales revenue for the company. The higher the net interest rate on sales, the stronger the profitability of pinduoduo Internet companies will be.

TABLE4-3 Return on total assets

Particular year	Industry maximal value	Industry minimal value	Mean	Pinduoduo
2019	26.30	-1.90	4.70	7.11
2020	30.20	-4.72	4.43	4.70
2021	32.67	-7.82	5.10	6.82
2022	45.46	-5.22	26.94	25.56
2023	439.9	-34.36	23.56	22.69

TABLE4-4 Gross profit margin

Particular year	Industry maximal value	Industry minimal value	Mean	Pinduoduo
2019	78.90	-27.70	63.00	65.56
2020	77.62	-41.00	68.10	73.86
2021	78.55	-35.10	65.60	78.55
2022	7990.	-1.90	4.80	8.11
2023	80. 20	. -326	4.39	4.80

TABLE4-5 Net profit on sales

Particular year	Industry maximal value	Industry minimal value	Mean	Pinduoduo
2019	47.46	-8.22	26.34	28.86
2020	41.93	-14.10	21.70	22.09
2021	36.30	-12.40	16.81	20.20
2022	456.9	-25.51	39.62	45.01
2023	55.62	-43.06	35.30	59.06

According to table 4-3 to Table 4-5 above, it can be seen that the change trend of return on total assets of Pinduoduo in the past five years is the same as the industry average. The overall change showed a state of first reduction and then continuous

recovery, while the gross sales profit and net interest rate have been higher than the industry average. Among them, the gross profit has shown an upward trend in the past three years, and the net profit has gradually decreased. It indicates that its labour and other related operating costs are gradually optimized and reduced, while the gross profit margin of sales gradually increases, but the net profit of sales decreases, indicating that its expenses outside the operating costs increase significantly.

In the solvency analysis, the total asset-liability ratio is selected to measure the solvency of Pinduoduo's enterprises in the three years from 2019 to 2023, as shown in Table 4-6.

TABLE 4-6 Asset-liability ratio

Particular year	Industry maximal value	Industry minimal	Mean	Pinduoduo
2019	73.00	18.20	47.00	28.09
2020	68.90	20.40	54.30	38.10
2021	71.00	26.00	58.10	36.06
2022	89.00	42.60	38.00	38.14
2023	68.90	2210.	34.90	48.05

Due to e-commerce platforms such as Weibo and Taobao cracking down on counterfeit and inferior products and shops, Pinduoduo has some low-quality stores, which has led to a deep risk crisis. As a result, Pinduoduo's assets have been affected, and its debt to asset ratio has always been low. Its debt to asset ratio is lower than the industry average of 40% -60%. Current liabilities account for a relatively large proportion of debt items, indicating that operators are relatively conservative. Since 2019, the asset-liability ratio has increased more, and a slight decline in 2021 has been in a more reasonable range.

The analysis of growth ability selects the growth rate of total assets to measure the development ability of Pinduoduo because the growth rate of total assets is also called the expansion rate of total assets, as shown in Table 4-7 below.

TABLE 4-7 Growth rate of total assets

Particular year	Industry maximal value	Industry minimal value	Mean	Pinduoduo
2019	277	10.2	92	146
2020	301	15.6	76	31.75
2021	368	8.1	105	46.68
2022	463	12.6	216	93.55
2023	565	15.3	265	66.65

It can be seen from Table 4-7 that after Pinduoduo went public in 2018, its company reached a certain scale and its expansion speed slowed down.

Then Table 4-8 reflects the main indicator data of Pinduoduo's cash flow capacity from 2019-2023.

TABLE 4-8 Changes of pinduoduo's operating capacity indicators in 2019-2023

Particular year	Turnover of total capital	Average accounts receivable turnover ratio
2019	0.7838	467.550
2020	0.7928	47.5012
2021	0.7271	507.701
2022	0.5838	48.8974
2023(Estimation)	0.5892	48.8734

Then, before the factor analysis, a descriptive statistical analysis was conducted on each financial indicator, and the results are shown in Table 4-9.

TABLE 4-9 Descriptive statistical analysis table of each financial indicator

	N	minima	maxima	mean	standard error
Rate of return on total assets Z ₁	93	-23.12%	43.22%	6.81%	0.1136
Net profit of sales: Z ₂	93	-47.10%	184.86%	30.91%	0.2282
Gross profit margin Z ₃	93	-44.30%	57.73%	11.78%	0.1978
Growth rate of total assets, Z ₄	93	-16.76%	121.23%	39.10%	0.2262
Total asset-liability ratio Z ₅	93	8.14%	73.60%	34.23%	0.1159
Total asset turnover rate Z ₆	93	0.1175	2.6132	0.6632	0.4749
Accounts receivable turnover rate Z ₇	93	-43.23%	138.41%	25.48%	0.3319

As seen from Table 4-9, for many investors and creditors, the vast majority of domestic listed enterprises have been established for a short time, and the small scale could be more attractive, so the financing methods are relatively single. However, since its listing in 2018, Pinduoduo has further expanded its scale to occupy the market and not be acquired by other enterprises to maintain a large number of current assets, so its short-term solvency is robust. In addition, also can be seen from the table, sales growth, total assets growth rate, cost margins and capital accumulation rate of minimum and maximum difference is very big, in the spell of Internet enterprise operating efficiency, according to personal experience and business knowledge, it is mainly with the enterprise's core competitiveness, enterprise scale

and research and development activities.

Finally, in the correlation test, Table 4-10 reflects the correlation coefficients between the seven financial indicators.

TABLE 4-10 Correlation coefficient of each financial index

	Z1	Z2	Z3	Z4	Z5	Z4	Z7
Z1	1.00	0.13	0.82	-0.1	0.03	0.21	-0.14
Z2	0.13	1.00	0.08	0.19	-0.18	0.33	0.23
Z3	0.83	0.08	1.00	-0.1	-0.03	0.14	-0.1
Z4	-0.1	0.23	-0.1	1.00	-0.48	0.23	0.38
Z5	0.82	0.03	0.86	-0.14	1.00	0.12	-0.13
Z6	0.23	0.37	0.28	0.28	-0.14	1.00	0.18
Z7	0.82	0.03	0.86	-0.14	0.03	0.12	1.00

As can be seen from Table 4-10, some of the seven financial indicators are with Z₁ And Z₇ With a significant correlation. Then, before factor analysis, KMO and Bartlett's test should be used to judge whether the 7 financial indicators are related, that is, whether the sample can be studied by factor analysis method. The test results are shown in Table 4-11.

TABLE 4-10 Results of the KMO and Bartlett's test

The Kai ser-Meyer-Olkin metric		0.752
	Approximate chi square	1321.372
The sphericity test of the Bartlett	df	63
	Sig .	0.000

Normally, KMO test values are suitable for factor analysis at 0.7 - 0.8. From Table 4-10, the KMO test value is 0.752 in the fit interval, and the Bartlett's sphericity test significance probability Sig. It is almost 0, less than the significance level of 0.05, so the factor analysis method can be used to study the financial influencing factors of the sustainable growth of Internet enterprises.

After the orthogonal rotation, the scoring coefficient matrix of each factor is obtained. The results are shown in Table Table 4-11. Use the scoring coefficient matrix to derive the score function of each factor.

TABLE 4-11 factor score coefficient matrix

	The first factor of the
Rate of return on total assets Z ₁	0.043
Net profit of sales: Z ₂	0.052
Gross profit margin Z ₃	0.037
Growth rate of total assets, Z ₄	0.483
Total asset-liability ratio Z ₅	-0.147
Total asset turnover rate Z ₆	0.082
Accounts receivable turnover rate Z ₇	-0.032

$$F_1 = 0.043Z_1 + 0.052Z_2 + 0.037Z_3 + 0.483Z_4 - 0.147Z_5 + 0.082Z_6 - 0.032Z_7$$

The comprehensive score $F = (16.728\%F_1) / 72.294\%$, indicating that profitability, solvency, cash flow ability and development ability all have a certain influence, that is, the four aspects involved in the financial performance evaluation indicators.

4.3 Results of the Study

The specific activities are shown in Table 4-13 below:

TABLE 4-12 Study hypothesis validation table

No	Hypothesis	Result
H1	The profitability under the traditional financial performance evaluation index has a significant impact on the sustainable growth of Internet enterprises.	Notable
H2	In the debt repayment risk analysis under the traditional financial performance evaluation indicators, the cash solvency has a significant impact on the sustainable growth of Internet enterprises	Notable
H3	The development ability in the business growth analysis under the traditional financial performance evaluation index has a significant impact on the sustainable growth of Internet enterprises.	Notable
H4	The cash flow ability in the asset quality analysis under the traditional financial performance evaluation index has a significant impact on the sustainable growth of Internet enterprises.	Notable

The content of the hypothesis was found to have a positive effect and therefore H1-H 4 were all effective. Specifically: the profitability under the traditional financial performance evaluation index has a certain significant correlation with Internet

enterprises such as pinduoduo. In the debt repayment risk analysis under the traditional financial performance evaluation index, the cash solvency has a significant impact on the sustainable growth of Internet enterprises, and has a certain correlation. The development ability in the business growth analysis under the traditional financial performance evaluation index has a positive impact on the relationship between Internet enterprises. The cash flow ability in the asset quality analysis under the traditional financial performance evaluation indicators has a certain positive impact on the sustainable growth of Internet enterprises.



Chapter 5 Conclusion and Recommendation

5.1 Conclusion

The Internet industry itself is a phenomenal industry in China. In the past two decades, it has been a period of dividend development, especially with the rapid increase in the number of Internet users, and the sudden outbreak of COVID-19, the annual growth rate of online users in the rising period has reached 8.9%, which is precise because of the rapid development of Chinese Internet enterprises. Pinduoduo, as one of the Internet enterprises, ranks relatively high, and its success shows that it has certain enterprise value. However, through Pinduoduo's financial statements, it is found that the competition in various fields of Internet enterprises has intensified in recent years, and the phenomenon of product homogeneity is serious, and the data on resources is also limited, resulting in a negative impact on the asset utilization rate of enterprises. Internet companies need to maintain competitive advantages in the industry. This study analyzes Pinduoduo through business factors and asset factors and discusses it based on the background of Pinduoduo. After all, Pinduoduo's listing, it needs a lot of money to develop new products and prevent mergers and acquisitions of other enterprises. The reason why this situation needs to be paid attention to is that the number of current assets of enterprises is large, which makes the speed of asset turnover slow. The operating efficiency of assets will also be affected by enterprise costs, and the profit margin will gradually decline. On the contrary, it will consume many resources but only bring profits to the enterprise.

The research results show that: 1) there is a significant difference between the actual and sustainable growth rates. The result of Pinduoduo Internet Company's research is that there are some limitations, namely, the overall growth trend is too fast, and the sustainable growth situation is not optimistic; 2) Profitability, solvency, cash flow ability and development ability all have a certain impact on the sustained growth of the financial performance evaluation indicators of Pinduoduo Internet enterprises, of which profitability has the most significant impact; 3) The main reason for the decline in the sustained growth capacity of Pinduoduo Internet enterprises is the continuous decline in profitability. In addition, 4) The low efficiency of asset operation and the insufficient use of financial leverage also lead to the decline in the sustainable growth ability of enterprises to a certain extent. Therefore, combined with empirical and relevant data, it is concluded that profitability, solvency, cash flow capacity and development capacity will impact the financial accounting of Internet enterprises, and profitability is the most significant.

At the same time, this paper refers to the research results of foreign scholars and relevant theories. The evaluation can reflect its value by sorting out the financial statement data from 2019 to 2023, and the overall objective value of Pinduoduo Internet enterprises can be obtained through quantitative research. Combined with the

research results, it can be evaluated to a certain extent to retain its relatively good experience and provide a particular reference for other similar industries.

5.2 Recommendation

Internet enterprises can use big data, cloud computing and other new technologies to deeply explore the communication needs, application scenarios, usage habits, consumer attitudes and cultural differences of user groups, master user preferences, and analyze the market performance and change trends of various types of Internet products in the entire industry according to user preferences, so as to timely grasp the changing direction of users' psychological needs and capture market hotspots. On this basis, expand new business and product fields, and find the future profit points of the enterprise. Internet enterprises should have the courage to innovate in technology, actively explore new areas and find new growth points. Consumers' consumption concepts have also changed with the development and progress of the times (Amaradiwakara & Gunatilake, 2016). In the past, enterprises pursued the expansion of the number and scale of users, but now they are pursuing higher quality and a higher level of user needs and services.

Internet enterprises have a slow asset turnover rate, a large amount of capital occupied by assets, poor asset operation ability and low asset use efficiency, which also affect the profitability of enterprises. Therefore, if Internet enterprises want to improve their sustainable development ability, they must constantly strengthen the management of assets, especially the management of funds, and improve the efficiency of asset operation (Song, 2022). They can lease or trust assets of non-core businesses, directly give up assets with poor profitability or loss, activate the asset stock, reduce asset occupation, and improve asset turnover speed. The funds obtained by enterprises by abandoning non-core business projects can be invested in high-quality projects or core businesses, or new products can be developed to improve the efficiency of capital use (Halina & Magdalena, 2021). In addition, Pinduoduo has many choices. On the one hand, it is also to obtain more financing. In addition to obtaining development funds through traditional financing, Internet enterprises can also comply with the development trend of the industry, use Internet finance for financing, and reasonably arrange the ratio of fixed assets and current assets. Assets are the material basis for the production, operation and development of enterprises.

According to quantitative analysis, Pinduoduo's debt continued to grow in 2020, resulting in an imbalanced debt structure and significant debt repayment pressure (Vysochan et al, 2021). Pinduoduo should allocate its fundraising methods and channels reasonably, choose appropriate fundraising methods to carry out fundraising combinations, reduce fundraising costs, improve fundraising efficiency, avoid debt repayment risks caused by single fundraising, and enhance Pinduoduo's reputation.

Secondly, improve the consumer credit management system. Due to the unique social fragmentation of Pinduoduo's social users and the diversity of its large number of users after its listing in 2018, Pinduoduo's backend should conduct big data analysis and

rate consumers based on their purchasing habits, amounts, etc., with a focus on identifying consumers with long-term bad purchasing habits.

Finally, strengthen the awareness of accounts receivable risk prevention. In the current situation, the collection of accounts receivable from Pinduoduo has become increasingly difficult. Therefore, we should establish an accounts receivable warning system based on this phenomenon to reduce our collection time. Real time tracking of the delinquency situation of Pinduoduo consumers, providing certain coupons and other incentives to encourage consumers to make early repayments.

5.3 Further Study

Further in-depth interviews and investigations are needed based on the above analysis and understanding of Pinduoduo's financial situation. After all, the Internet industry is developing rapidly. Many enterprises have begun to adopt R&D and innovation strategies and increase the strength of R&D and innovation activities to gain stronger competitiveness and market share to cope with the rapidly changing network social environment. If a company wants to survive and develop in the fierce international competition, it must establish its core competitiveness through R&D and innovation. Increasing R&D investment is an effective way to encourage R&D innovation and promote business growth. In the 2020 global enterprise market value ranking released by Slaughterhouse Coopers, half of the top ten enterprises are Internet and information technology service companies. This fully shows that in today's rapid development of science and technology, high-tech industries such as the Internet have been able to earn more profits than traditional industries and play an essential role in promoting the country's economic growth and improving the competitiveness of science and technology. These companies have a large consumer group. Based on maintaining existing products, they are still increasing investment in R&D and innovation to develop new products or technologies to occupy more markets. In the future, we need to pay attention to this research.

References

- Amaradiwakara, A. U., & Gunatilake, M. M. (2016). Factors affecting growth of small and medium enterprises in Sri Lanka. *Journal of Business & Economic Policy*, 3(4), 62-71.
- Albu, A. C., & Albu, L. L. (2021). Public debt and economic growth in Euro area countries. A wavelet approach. *Technological and Economic Development of Economy*, 27(3), 602-625.
- Aswar, K., & Saidin, S. Z. (2018). The influencing factors on the level of accrual accounting adoption: A conceptual approach. *Romanian Economic and Business Review*, 13(2), 22-28.
- Al-Zaqeba, M., Ineizeh, N., Jarah, B., Hamour, H., & Zeyad, Z. (2022). Intelligent matching: Supply chain management and financial accounting technology. *Uncertain Supply Chain Management*, 10(4), 1405-1412.
- Bocola, L., & Dovis, A. (2019). Self-fulfilling debt crises: A quantitative analysis. *American Economic Review*, 109(12), 4343-77.
- Chen, Y. (2022). Research on Financial Risk Analysis and Early Warnings in the Chinese Real Estate Industry-Evergrande Real Estate as an Example. *Financial Engineering and Risk Management*, 5(5), 106-119.
- Deng, G., Chen, J., & Liu, Q. (2022). Influence mechanism and evolutionary game of environmental regulation on green port construction. *Sustainability*, 14(5), 2930.
- Debreceny, R., Gray, G. L., & Rahman, A. (2002). The determinants of Internet financial reporting. *Journal of Accounting and Public Policy*, 21(4-5), 371-394.
- Esterhuysen, L., & Wingard, C. (2016). An exploration of the online investor relations (IR) practices of companies listed on the Johannesburg Stock Exchange (JSE). *South African Journal of Economic and Management Sciences*, 19(2), 215-231.
- Flora, D. B. (2020). Your coefficient alpha is probably wrong, but which coefficient omega is right? A tutorial on using R to obtain better reliability estimates. *Advances in Methods and Practices in Psychological Science*, 3(4), 484-501.
- Fan, K. K., & Feng, T. T. (2021). Sustainable development strategy of Chinese animation industry. *Sustainability*, 13(13), 7235.
- Habek, P., & Wolniak, R. (2015). Factors influencing the development of CSR reporting practices: Experts' versus preparers' points of view. *Engineering Economics*, 26(5), 560-570.
- Halina, B., & Magdalena, W. (2021). The use of IT systems in financial and accounting services for enterprises in the conditions of the COVID-19 pandemic. *Procedia Computer Science*, 192, 4112-4119.
- Huang, H., & Zhang, J. (2021). Research on the environmental effect of green finance policy based on the analysis of pilot zones for green finance reform and innovations. *Sustainability*, 13(7), 3754.
- Hosseini, G., & Ramezani, A. (2016). Factors influencing sustainable entrepreneurship in small and medium-sized enterprises in Iran: A case study of food industry. *Sustainability*, 8(10), 1010.
- Heeks, R. (2010). Do Information and Communication Technologies (ICTs) contribute to development? *Journal of International Development*, 22 (1), 625-640.

- Hosman, L. (2011). Making the transition from pilot to scale: examining sustainability and scalability issues in a public-private telecenter partnership in Sri Lanka. *Information Technology for Development, 17*(3), 232-248.
- Kleine, D., (2009). The ideology behind the technology – Chilean microentrepreneurs and public ICT policies. *Geoforum, 40*(1), 171–183.
- Kang, H. (2013). A guide on the use of factor analysis in the assessment of construct validity. *Journal of Korean Academy of Nursing, 43*(5), 587-594.
- Kusumasari, D. (2020). External debt of Indonesia: From debt-led growth to growth-led debt. *Jurnal Ekonomi Pembangunan, 18*(1), 21-30.
- Lima, K. P. F. (2022). Sovereign solvency as monetary power. *Journal of International Economic Law, 25*(3), 424-446.
- Li, X., Ge, X., Fan, W., & Zheng, H. (2021). Research on spatial correlation characteristics and their spatial spillover effect of local government debt risks in China. *Sustainability, 13*(5), 2687.
- Levytska, S., Akimova, L., Zaiachkivska, O., Karpa, M., & Gupta, S. K. (2020). Modern analytical instruments for controlling the enterprise financial performance. *Financial and credit activity problems of theory and practice, 2*(33), 314-323.
- Liu, J., Zhao, M., Zhang, C., & Ren, F. (2023). Analysis of the Influence of Heterogeneous Environmental Regulation on Green Technology Innovation. *Sustainability, 15*(4), 3649.
- Marais, M. A. (2011). *Analysis of the factors affecting the sustainability of ICT4D initiatives*.
- Ma, Y., Men, J., Li, M., & Li, X. (2021). Sustainable performance evaluation: evidence from listed chinese mining corporations. *Entropy, 23*(3), 349.
- Mirowski, P., & Van Horn, R. (2005). The contract research organization and the commercialization of scientific research. *Social studies of science, 35*(4), 503-548.
- Motoc, M. M. (2022). The Liquidity and Indebtness Indicators in Evaluating Bankruptcy Risk Assessment and Insolvency Risk. *Ovidius University Annals, Economic Sciences Series, 22*(1), 902-910.
- Mucai, G. P., Kinya, G. S., Noor, A. I., & James, E. R. (2014). Tax planning and financial performance of small scale enterprises in Kenya. *International Review of Management and Business Research, 3*(2), 1236.
- Moussié, R., & Alfery, L. (2022). Pandemic, informality and women's work: Redefining social protection priorities at WIEGO. *Global Social Policy, 22*(1), 190-195.
- Munangi, E., & Bongani, A. (2020). An empirical analysis of the impact of credit risk on the financial performance of South African banks. *Academy of Accounting and Financial Studies Journal, 24*(3), 1-15.
- Mirza, M. A., Khurshid, K., Shah, Z., Ullah, I., Binbusayyis, A., & Mahdavi, M. (2022). ILS Validity Analysis for Secondary Grade through Factor Analysis and Internal Consistency Reliability. *Sustainability, 14*(13), 7950.
- Mieg, H. A. (2022). Volatility as a transmitter of systemic risk: Is there a structural risk in finance?. *Risk Analysis, 42*(9), 1952-1964.
- Salinah, H. T. (2016). *Factors influencing the effectiveness of enterprise risk management (ERM) in public listed companies/Salinah Haji Togok* (Doctoral dissertation, University of Malaya).

- Tanklevska, N., & Miroshnichenko, V. (2019). Theoretical basis of managing of enterprises' financial potential on the basis of anti-crisis management. *Agricultural and Resource Economics: International Scientific E-Journal*, 5(2), 51-61.
- Kušter, D. (2022). The Impact of Working Capital Management on Profitability: Evidence from Serbian Listed Manufacturing Companies. *Economic Themes*, 60(1), 117-131.
- Penrose, E. T. (1959). Profit sharing between producing countries and oil companies in the Middle East. *The Economic Journal*, 69(274), 238-254.
- Qiao, S., & Wang, Q. (2021). The effect of relational capital on organizational performance in supply chain: the mediating role of explicit and tacit knowledge sharing. *Sustainability*, 13(19), 10635.
- Sun, X., Feng, Q., & Li, J. (2021). Understanding country risk assessment: a historical review. *Applied Economics*, 53(37), 4329-4341.
- Song, Y. (2022). A Case Study of the Formation Mechanism of “High Deposit and High Loan” in Listed Companies—Take Kangmei Pharmaceutical’s Financial Fraud as an Example. *Law and Economy*, 1(1), 23-28.
- Ślusarczyk, B., & Grondys, K. (2019). Parametric conditions of high financial risk in the SME sector. *Risks*, 7(3), 84.
- Suciu, A. D., Tudor, A. I. M., Chițu, I. B., Dovleac, L., & Brătucu, G. (2021). IoT technologies as instruments for SMEs' innovation and sustainable growth. *Sustainability*, 13(11), 6357.
- Tzovas, C. (2006). Factors influencing a firm's accounting policy decisions when tax accounting and financial accounting coincide. *Managerial Auditing Journal*, 2(12), 12-20.
- Vysochan, O., Yasinska, A., & Hyk, V. (2021). Selection of accounting software for small and medium enterprises using the fuzzy topsis method. *TEM Journal*, 10(3), 1348-1356.
- Wang, J., & Wang, Y. (2022). Analysis on Influencing Factors of Financial Risk in China Media Industry Based on Entropy-critic Method and XGBoost. *Academic Journal of Business & Management*, 4(2), 102-106.
- Wielki, J. (2020). Analysis of the role of digital influencers and their impact on the functioning of the contemporary on-line promotional system and its sustainable development. *Sustainability*, 12(17), 7138.
- Xie, C., & Liu, C. (2022). The Nexus between Digital Finance and High-Quality Development of SMEs: Evidence from China. *Sustainability*, 14(12), 7410.
- Yu, M. (2020). On the application of incentive mechanism in human resource management. *Region-Educational Research and Reviews*, 1(2), 1-10.
- Zhang, S. L. (2020). Analysis of the impact of the new crown epidemic on the job fairs of colleges and universities. *Digital World*, 1(05), 194.
- Zhao, S., Zhang, P., & Li, W. (2021). A study on evaluation of influencing factors for sustainable development of smart construction enterprises: Case study from china. *Buildings*, 11(6), 221.
- Zhou, S., & Zeng, S. (2022). Research on Financial Risk Evaluation of New Energy Vehicle Listed Companies Based on Z-value Model. *Frontiers in Business, Economics and Management*, 5(3), 183-187.
- Zhang, X., Meng, Q., & Le, Y. (2022). How do new ventures implementing green innovation strategy achieve performance growth?. *Sustainability*, 14(4), 2299.

- Zeng, F., Lee, S. H. N., & Lo, C. K. Y. (2020). The role of information systems in the sustainable development of enterprises: A systematic literature network analysis. *Sustainability*, 12(8), 3337.
- Zhang, J., Qu, X., & Sangaiah, A. K. (2018). A study of green development mode and total factor productivity of the food industry based on the industrial internet of things. *IEEE Communications Magazine*, 56(5), 72-78.
- Zenios, S. A. (2022). The risks from climate change to sovereign debt. *Climatic Change*, 172(3-4), 30.
- Zhou, J. (2022). Analysis and countermeasures of green finance development under carbon peaking and carbon neutrality goals. *Open Journal of Social Sciences*, 10(2), 147-154.



Appendix

Appendix A: Bright eye, the profit big exceeds expectations

Pinduoduo 2021 performed well, with revenue up 89% year on year and an adjusted net profit of Rmb 4.1 billion, far better than market expectations for a loss of 2.8 billion yuan. Even though the industry faces multiple challenges and community group-buying investment continues, Pinduoduo still shows surprising profitability. Pinduoduo launched the "10 billion agricultural research project" to support agricultural modernization and rural revitalization. Management guidance of the company will not be affected by the key software corporate tax rate policies. The 2021 results will boost investor confidence in the visibility of long-term profits, and the 2021 profit fluctuations (due to marketing expenses, community group buying and agricultural investment rise) will not change the long-term investment logic. We raised our adjusted net profit margin forecast for 2021-2023 by 4-6% and kept our target price unchanged at \$175.

Pinduoduo (PDD) turnover on February 1,2023 was \$914 million, ranking 71st among the US stocks on the day, with a volume of 8.8855 million. The latest price of Pinduoduo (PDD) was \$102.98, up 5.10% on February 1,2023, up 6.73% in the past five trading days, up 5.10% in February, up 26.28% year-to-year and up 78.20% in the past 52 weeks.* If the company is listed for less than 52 weeks, the 52-week rise or fall is the rise or fall since listing (the same is less than one month or less than five trading days).

Date	Code	Company name	Turnover / Volume USD	Settlement	Price limit
On February 1,2023	PDD	Pinduoduo	9.14hundred million	888.55 absolutely \$102.98	5.10%
On January	PDD	Pinduoduo	7.06hundred	712.65absolutely \$97.98	0.85%

31,2023			million			
On January 30,2023	PDD	Pinduoduo	10.28hundred million	1054.81absolutely	\$97.15	-7.19%
On January 27,2023	PDD	Pinduoduo	6.17hundred million	590.28absolutely	\$104.68	0.02%
On January 26,2023	PDD	Pinduoduo	11.92hundred million	1162.42absolutely	\$104.66	8.47%

[Company profile]

Pinduoduo was registered in the Cayman Islands on April 20,2015. It is a third-party mobile e-commerce platform under the mode of Shanghai Dream Information Technology Co., LTD. It is also a new e-commerce pioneer with people first. Born in the mobile era, Pinduoduo started with an agricultural products retail platform, deeply cultivated agriculture, created a new model of agricultural products retail featuring pinduoduo, and gradually developed into a comprehensive full-category e-commerce platform with distinctive agricultural and by-products. It is the only pure mobile e-commerce platform with scale in the world. As the pioneer of new e-commerce, Pinduoduo is committed to creating lasting value for the majority of users by integrating "more benefits" and "more fun". As of June 2021, the annual active users of the platform reached 849.9 million, the number of merchants reached 8.6 million, and the average daily number of packages in transit exceeded 100 million. It is the e-commerce platform with the largest number of users in Chinese mainland region and the largest online retail platform for agricultural and by-products in the world.

Appendix B:Pinduoduo _2021 annual report balance sheet

	Annual Report for 2021	View All Balance Sheets>>
expiry date	2021-12-31	
Report type	combined statements	

	Annual Report for 2021	View All Balance Sheets>>
Report date	1,231.00	
Original currency	Renminbi	
Pre-market / Post-market marketing	After listing	
circulating assets:		
Cash and cash equivalents (RMB)	6,426,715,000.00	
Restricted deposits and cash flows (RMB)	59,617,256,000.00	
Amount receivable from related parties (Yuan)	673,737,000.00	
Prepayment and other receivables flow (RMB)	3,424,687,000.00	
Short-term investment (RMB)	86,516,618,000.00	
Other items of current assets (Yuan)	4,250,155,000.00	
Total current assets (RMB)	160,909,168,000.00	
non-current assets:		
Property, Plant and Equipment (RMB)	2,203,323,000.00	
Intangible assets (RMB)	701,220,000.00	
Non-current (RMB)	31,504,000.00	
Other items of non-current assets (RMB)	17,364,503,000.00	
Total Non-current assets (RMB)	20,300,550,000.00	
Total assets (YUAN)	181,209,718,000.00	

	Annual Report for 2021	View All Balance Sheets>>
cash liabilities:		
Financial lease debt flow (RMB)	427,164,000.00	
Flow of funds payable to related parties (Yuan)	64,472,721,000.00	
Other payables and accrued expenses (RMB)	15,252,277,000.00	
Other items of current liabilities (RMB)	13,577,552,000.00	
Total current liabilities (RMB)	93,729,714,000.00	
non-current liability:		
Non-current financial lease liabilities (RMB)	544,263,000.00	
Non-current derivative liabilities (yuan)	11,788,907,000.00	
Non-current (RMB)	31,291,000.00	
Other items of non-current liabilities (RMB)	996,000.00	
Total non-current liabilities (RMB)	12,365,457,000.00	
Total liabilities (YUAN)	106,095,171,000.00	
shareholders' equity:		
Common stock (YUAN)	161,000.00	
Equity Premium (Yuan)	95,340,819,000.00	
Retained earnings (RMB)	-17,706,533,000.00	
Accumulated other total income (RMB)	-2,519,900,000.00	

	Annual Report for 2021	View All Balance Sheets>>
Shareholders' equity attributable to the parent company (RMB)	75,114,547,000.00	
Total shareholders' equity (RMB)	75,114,547,000.00	
Total liabilities and stockholders' equity (RMB)	181,209,718,000.00	
declaration date	2022-04-25	
accounting standard	U. S. Accounting Standards	
audit opinion		
Nuclear number division		
Related statements	Pinduoduo _2021 annual report profit statement	Pinduoduo _2021 annual report cash flow statement