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**Feasibility analysis of local taxation of
cross-regional companies in selected
industries in China**

Master's thesis

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Declaration

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2. I hereby declare that my thesis has not been used to gain any other academic title.
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In Jinlin 2 8, 2022

Yuanpeng Wang

Abstract

Previous research on Internet taxes in China has focused on the need to establish a tax system, and little has been done on specific tax enforcement methods and the value of Internet consumers themselves. The approach to Internet taxes in China will be proposed and its viability will be evaluated in the paper. That is giving local governments higher taxing authority and establishing a local Internet tax collection system that allows some business activities to pay a portion of the tax in the user's region, rather than just giving the tax to the city where the company is located. The findings of this paper may provide reference and theoretical support for the development of a future Internet tax bill in China.

The paper introduces the research background through the development of international Internet tax bills and international debates. I will provide theoretical and moral support for local Internet taxes by introducing user participation theory, destination tax theory, site-specific rent theory, and new economic geography. In addition, I will quantitatively measure the tax losses caused by a representative business model of the Chinese Internet, namely, the iQIYI online video payment project, to other Chinese cities, and concludes that this alone provides data support. Finally, the analysis of the Internet business model provides the target, proportion and method of collecting local taxes on the Internet.

Keywords

Internet Tax, Digital Services Tax, Tax Loss, User Participation Theory, Location-Specific Rent, Meta-analysis, Fiscal Decentralization, Fiscal Federalism

Title

Feasibility analysis of local taxation of cross-regional companies in selected industries in China

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Introduction

Since the economic take-off of World War II, large multinational monopolies have gradually emerged around the world. The companies rely on certain forms, especially the Internet, to make money, but they do not pay a single penny to the cities where their users are located. People now rely heavily on the Internet for their consumption, so the economic activities have cost some regions significant tax revenues. The European Union estimates that tax avoidance by multinational companies costs its member states €50-70 billion a year in fiscal losses.(Yuxiao, 2018)

Various countries have introduced laws on Internet taxation, such as the European Union's proposal for a Common Consolidated Corporate Tax Base and the UK's proposal to tax digital services based on the value of users. However, international plans for such a tax came to an abrupt end due to opposition from the U.S. and the use of the "301 investigation" to threaten a trade war against the country that introduced the Internet tax.

Therefore, I focused my research on China. In China, many Internet companies are in a monopoly position and their business model relies on hundreds of millions of consumers across the country to support their customers, who are located in all provinces of China. However, the companies do not pay a penny to the cities where the users are located and only pay taxes in specific regions, which creates something similar to the loss of taxes in different regions internationally. The worse thing is that due to agglomeration effect, big cities and companies also attract highly qualified people in small cities, causing population loss. I would like to propose a public policy that some business activities in China should pay a part of the tax in the region where the user is located, instead of just giving the tax to the city where the company is located.

I analyze the feasibility of adopting the above-mentioned form of Internet taxation at the local level in China. Theoretical support for the imposition of an Internet tax is obtained by studying the international theory of Internet user value and related practices. By measuring data on certain Internet business models in China, I quantitatively estimate the value of tax loss and also determine the necessity of Internet tax collection. Next, by using meta-analysis analysis, I conclude that it is a good approach to levy Internet tax at the local level. Finally,

I clarify the target of the tax and the possible ways of taxation. I hope that my paper can provide some theoretical support for the future of Internet taxation at local level in China.

1. Background of The Study and Introduction to the World Literature

1.1 Tax Avoidance by Internet Companies

1.1.1 The Internet Facilitates Corporate Tax Avoidance

The digital economy provides conditions for tax avoidance by Internet companies.

Firstly, permanent establishment is an important criterion for taxation, however, in the role of the digital economy, the transactions of goods and services not only no longer requires the existence of an objective entity, but is more accustomed to the use of intangible assets. The lack of permanent establishment therefore results in taxes arising from online transactions can't be tracked by the tax system.¹⁻¹ It is estimated that in 2012, the U.S. lost approximately \$12 billion in sales tax due to the Internet, which is about 3.8% of the sales tax collected that year, and the tax loss is increasing each year.(Agrawal and Fox, 2017)

Secondly, the unique and novel operation of the digital economy has led to significant information asymmetries between businesses and tax authorities. The enhanced secrecy of data makes it difficult for multinational enterprises to be open and transparent in their information, so tax avoidance is less likely to be detected by domestic and foreign tax authorities.(Caichang and Xiaomin, 2022)

1.1.2 Tax Avoidance by Internet Companies

1.1.2.1 Circumvention of Framework Recognized by Permanent Establishment

Permanent establishment (PE) is a fixed place where an enterprise in one country conducts its business activities in another country. However, because the server equipment used in cross-border e-commerce can easily change locations and corporate contracts can be signed directly on the website, a large number of cross-border e-commerce businesses were found to have no permanent establishment or agency permanent establishment and therefore were not subject to tax. In 2016, France attempted to establish new rules to prevent such tax avoidance, but abandoned that as they were deemed incompatible with the French constitution. That indicates both international domestic tax law are difficult to achieve effective taxation of cross-border e-commerce enterprises, which means the current level of international tax regulation has seriously lagged behind international economic development.(Yuxiao, 2018)

1.1.2.2 Transferation of International Pricing

Transfer pricing refers to the rules of pricing transactions between commonly owned enterprises, which is the internal price making between affiliated enterprises when they conduct related transactions such as selling products and transferring assets. However, the transfer pricing operation is carried out by enterprises through the use of "high tax low price" and "low tax high price". For instance, the high tax country in the transaction of goods and services with the low tax country can reduce the price, so that the reduced tax amount payable of the high-tax member is higher than the increased tax amount payable of the low-tax member. Then it can reduce the tax burden of companies and increase their net income after tax.

1.1.2.3 the Abuse of the Framework of Controlled Foreign Enterprise Rules

If placing key intangible assets used to sell products and services in a CFC (Controlled foreign company), the sales do not have to operate through the CFC's home country. Then e-commerce businesses can pay less or even no tax in the CFC's jurisdiction.

1.1.3 Examples of Tax Avoidance by Internet Companies

In 2011, Google shifted 80% of its global profits obtaining that year to a shell company in Bermuda, which made it achieve a tax avoidance of more than \$2 billion. In 2016, Amazon's revenue in Europe was €21.6 billion (about RMB 172.016 billion), but it paid only €16.5 million (about RMB 131.4 million) in taxes, with a tax liability of only 0.076%. In the same year, France became Airbnb's second largest market, yet the company paid only €92,944 in taxes in France at the time.(Yuxiao, 2018)

1.1.3.1 the Tax Avoidance of Apple.

In 2016, the EU ruled that its member state, Ireland, had given Apple illegal state aid in the form of taxes and required Ireland to recover €13 billion in taxes from Apple.(Xu, 2017)

Apple created businesses in Ireland and the Netherlands. It reaped the benefits of the disparities in tax laws across nations and engaged in internal production activities and profit shifting, which effectively avoided a significant amount of corporate income tax.

Firstly, Apple Operations International (AOI) is registered in Ireland, but its actual management is in the British Virgin Islands (where it is exempt from corporate income tax), so Ireland is not entitled to tax AOI's corporate income. Moreover, AOI has a cost-sharing agreement with Apple's U.S. parent company and only needs to pay a little dollar amount when accepting intangible assets transferred from the parent company, so the corporation only needs to pay a small sum of tax on this.

Secondly, Apple Operations Europe (AOE), a subsidiary of Apple incorporated in the Netherlands, is considered an intangible entity. Therefore, under the check-the-box rules, the transfer of intangible assets is exempt from U.S. and Irish taxation for AOI and AOE.

Thirdly, Apple Sales International (ASI), an Irish subsidiary of Apple, is exempt from U.S. tax on internal transactions with AOI and AOE under the check-off agreement. The company is also subject to a low tax rate of 12.5% in Ireland on income from its European operations. Apple has been able to avoid tens of billions of dollars in taxes based on the tax incentives and policies of each country.(Yanfeng, 2017)

1.1.3.1.1 Negative Effects of Apple's Tax Avoidance

Under the trend of economic globalization, the production and manufacturing of the same product was not done independently by a certain country, but was distributed to different countries with the international division of labor in the industry. In the global value chain, because the value and value-added pricing of intangible assets and capital were much higher than other production factors, developed countries occupied the high point of profit distribution. The high-tech companies in the United States obtain a large amount of royalty income from overseas by virtue of their excellent scientific research capability and intangible asset property rights advantage, which makes them achieve global tax draw. However, developing countries are responsible for the processing and manufacturing process, which can only get a meager share of the profits. The extremely inequitable distribution of profits inevitably leads to an imbalance of interests between developed and developing countries.(Yanfeng, 2017)

1.1.3.2 the Tax Avoidance of Amazon

In 2012, Amazon Germany was questioned by Germany for paying too little tax to Germany. In the same year, the UK tax authorities also verified its tax payments for the same reason. According to the Institute on Taxation and Economic Policy (ITEP), a U.S. think tank, Amazon's federal tax rate was negative 2.5% in 2017, which led the Internal Revenue Service (IRS) to charge Amazon with tax evasion, but the IRS ultimately lost.(Caichang and Xiaomin, 2022)

Amazon's operations do not depend on physical business premises. The online transaction allows many digital businesses such as Amazon to not meet the requirements of a traditional permanent establishment, therefore the provider is exempt from tax obligations. Thus, it appears that the permanent establishment, which is the traditional basis for taxation in the context of the digital economy, is no longer applicable. Moreover, its existence provides loopholes for international tax avoidance by multinational corporations such as Amazon.

At the same time, the U.S. controlled foreign corporation tax deferral system also provides domestic tax avoidance conditions for many U.S. companies. In order to reduce tax leakage, the U.S. regulations exclude controlled foreign corporations (CFCs) from the "tax deferral" regulations and require them to pay taxes on time. However, the U.S. "check-the-box rule" allows U.S. multinationals to easily deny CFC status and avoid paying taxes.

The EU has three main allegations against Amazon. First, it argues that Amazon Europe only serves the purpose of transferring the right to use intellectual property and should not charge for it. Secondly, most of Amazon's profits were improperly transferred to its European branches without paying taxes on them. Finally, Amazon utilized the OECD model's notion of a fixed place of business to contest its position as a taxable person in Europe. In addition, Amazon further erodes the tax base of EU member states by transferring income earned in the UK, France and other countries to Luxembourg.(Caichang and Xiaomin, 2022)

1.2 History of Internet Taxes in Some Countries

1.2.1 United States

Since 2017, Amazon has been collecting sales tax on goods sold in all U.S. states (except for five states that do not collect excise taxes, including Oregon), and since 2018, Amazon has made some changes to its sales tax rules, and unlike the previous "no mandatory requirement for third-party sellers". In 2013, with the consent of Congress, the Marketplace Fairness Act was officially implemented. The bill would allow local governments to tax cross-state e-commerce, but it was ultimately blocked in the House of Representatives and has not been passed. It has not yet been passed and has no final legal effect. On the issue of "interstate Internet consumption tax or not" large Internet companies such as Amazon and Ebay, small third-party e-commerce companies, state governments and members of Congress all have different opinions.

In 1998, based on the spirit of the Internet at the time, the United States led the way with legislation to pass the "Internet Tax Freedom Act". It was introduced by Congressman Frank R. Wolf. Wolf himself serves Virginia's 10th District, which is home to Internet and high-tech companies. The main thrust of the so-called Internet Tax Exemption Act is not complicated, but is based on the basic idea that the Internet is free, or at least should enjoy tax-free treatment. Specifically, it prohibits states and local governments from imposing additional taxes on using Internet, no sales or use tax on Internet access services provided by Internet service providers; and prohibits multiple or discriminatory taxation of online sales. In 2003, the United States will no longer tax the provision of Internet services. The Internet Tax Nondiscrimination Act 2003 was passed by the Senate. However, these provisions only address Internet access services and do not address sales taxes on transactions over the Internet. In 1992, the Supreme Court ruled that one state can only tax a business if it has a physical store or chain of stores in that state. If online retailers and mail-order companies do not have a physical chain, they are not taxed on the sale of goods. In other words, the local government cannot impose any taxes on a company unless it has established a local branch.(Weizhen and Ying, 2015)

1.2.2 European Union

In June 1998, the EU published the Report on the Protection of VAT Revenues and the Promotion of Electronic Commerce, which proposed a 20% VAT on all EU online sales or services and a VAT on the provision of digital services by non-EU businesses to EU

businesses (excluding individual consumers). That marks the EU is the first organization in history to decide to impose VAT on online purchases.

The EU VAT on E-Commerce Directive, adopted by the EU in 2002, provides that non-EU businesses providing digital services to EU businesses or individuals via the internet should declare and pay VAT to the respective member state.

All digital services offered to individual customers throughout the EU are now, as of January 1, 2015, liable to VAT at the applicable VAT rate of the consumer's country. That provision may, to a certain extent, discourage some multinational e-commerce companies from setting up headquarters in low-tax EU nations to be able to reduce their tax burden.(Yuxiao, 2018)

1.2.2.2 Common Consolidated Corporate Tax Base

In 2001, the EU proposed the CCCTB (Common Consolidated Corporate Tax Base) for the first time in order to solve the problems of tax competition and cross-border tax avoidance caused by the differences in corporate tax systems among member states. However, the plan was not implemented due to the insistence of the UK, Ireland and other countries on maintaining tax sovereignty.

In October 2016, the European Commission issued a revised CCCTB plan, which is divided into two phases: the "Common Corporate Tax Base (CCTB)" and the "Consolidated Corporate Tax Base (CCCTB)". The first stage requires the harmonization of standards for computing corporate tax liability inside the EU, while the second stage necessitates major companies consolidating their taxable revenue inside the EU and allocate it to the member nations. in compliance with the regulations. To prevent the suggestion from being too idealistic, there are three short-term alternative solutions to the CCCTB: First, to adopt the "equalization tax" scheme for Internet companies such as Google and Amazon, which changes the current tax base from profit to business income (turnover). Second, a digital transaction "withholding tax" will be imposed on income from goods and services provided online by non-residents; Third, a separate tax will be imposed on income from the offering of online services or digital marketing, so that domestic customers will be taxed on transactions concluded remotely with non-resident entities.

On March 21, 2018, the European Commission reintroduced two separate legislative proposals to ensure fair taxation of digital services in the EU. Proposal 1 one is a general reform of the EU corporate tax law on digital services. This proposal would ensure that member states would be able to tax businesses that do not have a permanent establishment in their territory but make a profit. That would equalize the contribution of online business and traditional brick-and-mortar companies to the public purse, changing the way profits are distributed among member states, for example, by the location of the user at the time of consumption.

Proposal two is a temporary tax on certain specific revenues from digital services. This temporary tax currently prevents Internet e-commerce companies from evading EU taxes, but only as a temporary measure. The tax revenue will be collected by the country where the user is located, and the provision will only apply to companies with an annual turnover of €750 million and a turnover of €50 million in the EU, in order to reduce the burden on small and micro businesses. The scheme improves the EU's digital tax system and facilitates the establishment of a digital single market worldwide. If that is successfully implemented, the tax base of EU member states will be harmonized, and the problem of capital flowing into tax havens such as Ireland can be effectively solved. (Yuxiao, 2018)

1.3 International Debate on Internet Taxation

In the 1990s, after Japan established its strategy for the development of the digital economy, organizations and countries such as the Organization for Economic Co-operation and Development (OECD) followed suit. In March 2018, OCED released its "Tax Challenges from the Digitization of the Economy Interim Report, which identified three main factors that prevent value realization from the digitization of the economy: the lack of physical presence of cross-border businesses, the high reliance on intangible assets, and the importance of data and user engagement. The three points are also important characteristics of current digital service businesses.(Jie, 2021)

Commissioned by the G20, the OECD included the digital economy as the first action plan to tackle base erosion and profit shifting (BEPS) in 2013, supporting the taxation of value creation arising from economic activities and requiring value creation as an important

principle for delineating international tax administration rights and permanent establishment as a practical basis for judging whether the taxing country enjoys taxing rights. However, the high flexibility of digital enterprises makes it difficult for the criterion to be fully effective. For this reason, the OECD proposed the "significant economic presence" (SEP) scheme in BEPS and argued that the SEP tax nexus rule should take into account the existence of taxable entities of non-resident enterprises in the taxing country. However, no solution has been generally accepted by the international community so far. Therefore, for their own benefit and in anticipation of gaining a head start in future negotiations, many countries have embarked on unilateral actions.(Helin and Li, 2019)

1.3.1 National Approaches of Internet Taxation

Countries around the world have shown a positive attitude towards tax reform. In 2016, India was the first to introduce a tax on digital services. Italy introduced a web-based tax with a tax rate of 3% from January 2019. The UK introduced a digital services tax at a rate of 2% from April 2020. France introduced a digital services tax at a rate of 3% from January 1, 2019.

The UK's digital services tax system is based on the theory of "user engagement to create value" and identifies four main channels of value generation, namely user-generated content, deep engagement, network effects and externalities, and user contributions to brands. On this basis, the scope of taxation in the UK is defined as revenue from three types of digital services, namely social platforms, search engines and online marketplaces. That is, online advertising, user subscriptions, and data sales revenue through social media; advertising revenue from search engines; and commissions, subscription fees, delivery fees, and online advertising revenue from online marketplaces are taxed.(Caichang and Xiaomin, 2022)

The French digital services tax does not presuppose the existence of a permanent establishment, but focuses on digital platforms and Internet advertising services. Therefore, the scope of the French digital services tax can be summarized into two categories: first, income from intermediary services provided by digital platforms, which is the income generated by users who connect and interact with each other and trade goods and services through online platforms. The second is income from targeted advertising, as well as

income from data collected for advertising purposes, including profits from the purchase, storage and broadcast of advertising, as well as data management and transmission services related to users.

But there are many difficulties with international taxation. First, it is difficult to determine the scope of taxation in practice. For example, some of the services of digital enterprises do not bring direct income, but generate income by cross-operating with other businesses and improving efficiency, which inevitably makes it difficult to accurately delineate the scope of taxation. Second, it is impossible to determine whether a participant is a domestic user because there is no technology to locate and identify domestic users. For example, the existence of the VPN (Remote access through encryption and address translation) makes it difficult to determine the physical location of users. In addition, there is no clear answer to the question of whether the tax on digital services is a direct or indirect tax, so there are persistent questions about double taxation.

Whether it is for the purpose of competing for international tax rules or for the purpose of protecting domestic industries from trade frictions, the design of national digital service tax schemes has a strong local character.(Caichang and Xiaomin, 2022)

1.3.2 Countermeasures of the United States

Unlike other countries, in December 2017, the U.S. passed the Tax Cuts and Jobs Act, which opened a new round of tax reform. Before that, U.S. companies had a heavy income tax burden. The reform not only reduces the federal corporate income tax rate from 35% to 21%, but also implements a territorial taxation system that imposes only a 10.5% income tax on the foreign income of U.S. corporations under the controlled foreign corporation rules, with a credit of 80% of the tax paid abroad. This is intended to encourage the repatriation of capital and profits from outside the United States and to protect the U.S. tax base.(Helin and Li, 2019)

1.3.2.1 301 Investigation

After France voted on a bill to impose a digital services tax, the U.S. released the 301 Investigation: Investigation Report on the French Digital Services Tax. The report pointed out that the French digital services tax was discriminatory and unreasonable, and harmed

the commercial interests of the United States. Subsequently, the U.S. countered with tariff countermeasures against France and has launched investigations into other countries that have introduced digital services taxes (Helin and Li, 2019). In June 2020, the Office of the U.S. Trade Representative (USTR) launched "301 investigation" into dozens of countries that have adopted or are considering digital services taxes. On January 6, 2021, USTR issued 301 investigations into Italy, Turkey, and India. On January 13, 2021, USTR issued reports on the investigations of the United Kingdom, Spain, and Austria. On the same day, USTR announced the suspension of 301 investigations into Brazil, the Czech Republic, the European Union, and Indonesia because those jurisdictions have not yet implemented the DST under consideration.(Jie, 2021)

The so-called "301 investigation" refers to the U.S. under the "301 clause" of the Comprehensive Trade and Competition Act of 1998, which authorizes the Office of the United States Trade Representative (USTR) to investigate acts that harm U.S. trade interests and restrict the development of U.S. commerce. The Section was created during the Cold War and is considered a "trade diplomacy tool" of the United States. Under this provision, when the USTR believes that a policy of another country violates the relevant trade agreement or is unilaterally determined by the United States to be unjust or unreasonable, the USTR may ignore the WTO dispute settlement mechanism and directly take unilateral coercive retaliatory measures, including the imposition of tariffs, other import restrictions, withdrawal or suspension of foreign agreements, etc.(Jie, 2021)

The U.S. has not hesitated to launch the "301 investigation" against its allies, ostensibly because of the game of tax interests between countries, but deeper considerations are the U.S. attempts to maintain its own tax base security. The U.S. was initially very positive about the OECD's Base Erosion and Profit Shifting (BEPS) action plan, but later found that the plan was not fully consistent with national tax interests, and then created the "base erosion and anti-tax abuse rules" in the Tax Cuts and Jobs Act. The rule is intended to strengthen and promote U.S. science and technology innovation, and to enhance the U.S. leadership and competitiveness in global science and technology while maximizing the security of the U.S. tax base.

From the announcement issued by the Office of the U.S. Trade Representative, it can be seen that it considers the French digital services tax as "Unreasonable Tax Policy", which clearly violates the basis of the U.S. tax rules and international tax rules, such as extraterritoriality, targeting sales revenue (turnover) instead of the "301 investigation" is a substantive and substantive violation of U.S. and international tax rules.

The substantive reason for the 301 investigation is the U.S. belief that the French digital services tax challenges U.S. tax jurisdiction under the current international tax order. Without resistance, U.S. digital companies will have to pay local taxes in the country of origin on their sales revenues from overseas markets, and the U.S. national tax interests will suffer huge losses. At the same time, countries around the world will follow France's lead, so the U.S. must fight back strongly." The "301 investigation" has intensified the game of national tax interests under the challenge of economic digitization, which will definitely bring great impact on the international tax order. (Helin and Li, 2019)

1.3.3 Reasons Why Internet Tax cannot be Uniformly Levied Internationally

1.3.3.1 The Nature of Tax Classification is Unclear

The object of taxation of DST in each country is income rather than net profit, which theoretically raises the question of what kind of tax DST actually belongs to. Both the OECD model and the UN model only provide for the taxation of income or certain types of income (such as dividends, interest, etc.), but not the taxation of gross income. The U.S. believes that taxing income is contrary to current international tax rules.

In addition, taxes can be divided into direct and indirect taxes depending on whether the tax burden is easily transferable to others. Generally speaking, income taxation is a direct tax and commodity taxation is an indirect tax. However, there are different opinions on which kind of DST belongs to. The European Union considers DST as an indirect tax. Zhang Zhiyong (2020) argues that, in terms of either-or form, the tax base of the DST proposed by the EU is not income, so it is an indirect tax.

Chen Daesong and other scholars (2021) argue that DST blurs the definition of tax in traditional taxation and is a new tax. In terms of tax design, the DST is more of a direct tax because it is designed to supplement the inadequate tax paid by companies and to tax the

direct profits of enterprises, however, in terms of tax implementation, the DST has the characteristics of an indirect tax.(Jie, 2021)

Therefore, it is difficult to define the tax nature of DST under the current rules, which may bring a lot of problems to tax collection and administration.

1.3.3.2 Subversion of the Permanent Establishment Rule

According to the current international taxation principles, it is a prerequisite for an enterprise to have a permanent establishment in that country to pay tax. The current international order also adopts the permanent establishment criterion in determining the source of business income, however, in the domestic tax laws of some countries such as common law, the place of transaction is determined as the source of business income. The international tax jurisdiction rules make permanent establishment a necessary condition for tax collection in order to reconcile the taxing rights of the resident country and the source country.

The OECD's proposed "significant digital presence" may be the new standard for determining permanent establishment. This means that the presence of a taxable entity is determined by technical factors such as income, digital technology, and user factors. When a non-resident enterprise has a substantial impact on the economy of the country, it may be deemed to have a taxable entity in that country.

1.3.3.3 Unclear Tax Rules and Double Taxation

The U.S. believes that the DST rules in the U.K., Turkey and other countries are not clear enough, which may lead to many problems when companies pay taxes. For example, the Turkish DST provides that the president has unilateral authority over the DST income threshold and tax rate. But that lacks guiding factors such as the scope of the authority and the deadline for notification of changes.

There is no precedent for the DST to be applied in a standardized way in various countries, which means that double taxation is possible. For example, in the UK, companies are required to pay both DST and corporation tax on the same income. On the other hand, the different DST rules and taxation methods adopted by different countries lead to conflicting

tax jurisdictions, which can result in double taxation of the same income by the resident country and the source country. For example, a U.S. company that pays DST in Turkey is still subject to U.S. corporate income tax.

1.4 Summary

Internet companies have become the norm in international tax avoidance. Although different countries have enacted relevant laws intended to impose digital taxes, the countries that dominate the Internet interests, mainly the United States, have expressed strong opposition and even threatened the implementation of digital tax laws with trade wars against their allies. At the same time, the transnational digital tax law itself has theoretical and practical limitations. In summary, I believe that it is not feasible to implement an Internet tax internationally.

2. Theoretical and Ethical Basis of Internet Taxation

Even countries with well-established tax systems are under pressure from e-commerce. For example, the Prime Minister of New Zealand has stated that his country has lost significant revenue associated with online and digital transactions. E-commerce has spread around the world, but the imperfection of its associated tax system has caused great distress for many countries. Therefore, in this section, I will present several theories for improving Internet taxation that can provide theoretical support for the tax approach I prefer to analyze. (Agrawal and Fox, 2017)

2.1 Related Theories

2.1.1 Theory of User Participation

Users generate a large amount of data when they enjoy digital services, and digital enterprises analyze these interaction data to facilitate their business decisions and business expansion. Therefore, this kind of interactive transaction is essentially a mutually beneficial behavior. For example, when a user uses Google to look up information, Google can also collect information about that user. The user is both a consumer and a producer of data, thus the concept of producer-consumer is formed.

In fact, the value of the massive amount of data contributed by users on digital platforms has far exceeded the development and operation costs of digital platforms. For example, the value of Google's individual user data has reached \$720 per year in 2015. The increase in digital users makes data richer and more profitable for digital companies. This "user participation theory" is a new development of value creation theory in the digital economy and forms the cornerstone of the theory of digital services taxation. As users participate in value creation and countries can consider their own nationals as providers of commercial value on the Internet, the state should have the right to tax and redistribute the digital economy within its borders.

The EU and the UK have a much deeper understanding of user participation. For example, the EU believes that user participation refers to the use of data generated during the use of platforms by digital enterprises to analyze users' preferences in order to accurately place advertisements or provide data analysis services to third parties.

In addition, the "user participation theory" should be understood as the additional economic value generated by the user's personal information. For example, the number of times a user visits a website or video can increase the visibility of the product, and the user's comments on social media can play a role in promoting the product. The aggregation of users' data provides practical guidance for businesses to analyze market demand, which will contribute to business decisions, advertising and other business development.

The UK, on the other hand, believes that user participation leverages the value created by the activity of a large number of users on digital platforms for real business. New Zealand also suggests in the proposal of digital service tax that the size and engagement of user groups will determine the value of digital business services.

However, when an offshore digital business creates profits from user data in the user's country, but does not pay tax in the user's country, that means the user's contribution to the digital business's profits is not taken into account for taxation purposes. For the possibility, the EU advocates taxing digital services as a percentage of the total EU revenue generated by "user participation".

Nevertheless, not all countries are positive about that, and the U.S. has responded to Europe's "user participation theory" with "301 investigation," leaving uncertainty about how a digital services tax would work globally.

2.1.2 Theory of Destination Taxation

The question of whether taxes should be levied on a destination or origin basis has attracted a great deal of attention from economists (Keen et al. 2002). The destination principle is widely accepted because firms in different regions have the same marginal cost of production when they compete for production. However, the specificity of e-commerce and other emerging technologies may cause the principle to be improved.

2.1.2.1 Background

Business conduct is usually subject to sales tax, which means that once a transaction occurs, the vendor should pay tax on it, regardless of where the company is located or where the consumption occurs. In addition, each state has enacted a sales tax followed by a

use tax that shifts the legal impact of the tax on the vendor and the consumer. For example, if the seller fails to pay the tax, the responsibility for paying the tax will shift from the seller to the buyer. The combination of sales and use taxes has led to the creation of a tax that is similar to a destination tax.(Agrawal and Fox, 2017)

2.1.2.2 Limitations

There are loopholes in the collection of taxes on e-commerce sales based on the destination principle. For example, the place of sale and use of digital products is difficult to determine, so e-commerce merchants often shift responsibility for the tax from the supplier to the buyer through loopholes in the tax provisions, resulting in a loss of tax revenue. Because the destination can be determined by the billing address of a credit card and payment methods such as internet banking can allow the true destination to be modified, a loophole that makes e-commerce highly susceptible to promoting tax evasion.(Agrawal and Fox, 2017)

Agrawal (2015b) shows that the Internet can have an impact on tax competition and tax rates. Two outcomes may arise from online transactions. First, if online transactions are tax-free, the Internet will exert downward pressure on tax rates, which is most evident in places with high tax rates. Second, widespread Internet use will raise tax rates if online companies are able to pay taxes in the appropriate jurisdictions.

After empirical research we learn that the first scenario is more likely to occur by comparison. For areas with a large number of Internet companies, the Internet puts upward pressure on local tax rates. Some regions provide evidence that the Internet can boost tax revenues, which suggests that physical presence is important for online companies.

2.1.2.3 Comparison Between the Origin Principle and Destination Principle

Behrens et al. (2009) and others argue that the origin principle allows for a more equal spatial distribution of economic activity relative to the destination principle. Intuitively, the shift from the destination to the origin principle allows more firms to invest in low-tax regions. Whereas the preferences of the destination principle can only be accessed by local consumers, the origin principle can benefit all consumers, which alleviates the phenomenon of over-agglomeration of firms.(Agrawal and Fox, 2017)

However, Keen and Wildasin (2004) argue that the destination principle is superior to the origin principle. Although the origin tax can shift taxes on income from remote sales from consumers to firms, the intense tax competition that this may trigger for firms. In addition, while distribution to companies may be more equal under the origin principle, tax revenues may be lower (Behrens et al., 2009). The EU reform on the taxation of digital products also shows that the view is widely accepted. Although the destination principle still has some problems, they can be better addressed by policies such as cross-jurisdictional transfer of income and antitrust than the origin of principle.(Agrawal and Fox, 2017)

2.1.2.4 National Practices

In addition to the EU, a number of countries and regions have introduced new policies regarding the taxation of digital products, although many of them have not yet been adopted. For example, New Zealand has proposed to impose a GST on digital services and require out-of-state companies to pay the tax. In exchange, New Zealand could grant a simplified registration process. Australia and Japan have similar proposals.

There is also a push for laws in the U.S. For example, Alabama's tax commissioner says companies with sales over \$250,000 must start paying sales tax, even if they have no physical presence. South Dakota also has a tax law that requires sales tax to be collected from remote companies in the state with sales over \$100,000.

And the policy is not limited to developed countries. South Africa passed a proposal in 2014 to require businesses to tax consumer e-commerce, and the results have been impressive. India's central bank has also said that taxing e-commerce is important. Brazilian states originally imposed only an origin tax, but have also recently imposed an additional destination tax on interstate e-commerce sales. A common condition in these proposals is the requirement for simpler registration.

2.1.3 the Theory of Location-Specific Rent

For this type of taxation, scholars have proposed the theory of taxing profits generated in a specific region (Location-Specific Rent (LSR) theory to systematically justify the taxation

of digital services in order to justify the taxation of cross-border Internet in Internet-consuming countries.

LSR theory is also based on the basic judgment that "Internet users create value". The basic theoretical framework is that many countries already impose royalties, rent taxes and corporate income taxes on the exploitation of natural resources; one can think of the Digital Services Tax (DST) as a tax on the economic benefits derived by digital platform companies from data resources located in a specific area.(Ding, 2021)

The LSR is progressing very rapidly after 2018, and it was initially disfavored by scholars who saw its motivations as being in populism and trade protectionism, among others.

Just as many countries already impose royalties, rent taxes, and income taxes on natural resource extraction, one can think of the DST as a tax on the economic rents earned by digital platform companies from a specific location. The LSR has two advantages. First, it generates the least distortion to business decisions from the tax. Second, the district in which the rent is located can reasonably claim the right to tax, while mitigating the risk of overtaxation.

2.1.3.1 DST can be Converted to LSR

To prove that DST is a tax on LSR, we need to prove two things. Firstly, whether the digital platform earns a substantial amount of rent. That is indisputable. We know from studies of tax avoidance by multinational corporations that some Internet companies receive substantial economic rents, and although the profit margins may not be high, they enjoy a highly advantageous market position. In order to reach a monopoly position, the company needs to make large investments, and therefore the profits earned may be low or even persistently loss-making during the period when the company is vigorously building up its market share. That can be seen everywhere in the development history of Chinese Internet companies. Venture capital firms usually bet on two companies in the same industry, invest wildly in them, take funds to subsidize users, let customers spend little money to enjoy the service, then dominate the two companies to merge and form an absolute monopoly when they form a monopoly position in the industry. It can be said that when the sheep stay in the sheep pen for a long time, they can do as they please.

Secondly, when the platform operates internationally, how the rent is traced back to the user's country is an issue that needs attention. We can regard the value generated by users in the process of using the platform as a natural resource with a definite location. Then, we start from two aspects so that we can clearly understand the LSR model.

On the one hand, the source of the platform rent is identified, which means the jurisdiction in which the platform user is located has changed, resulting in a surplus of new producers or consumers. On the other hand, when the use of a technology in one country has no opportunity cost compared to its use in other countries, the technology is uncompetitive and therefore the profits generated by the resulting technology can belong to the country of use, even if the technology can be used remotely or was not invented in the country where it is being used.

When the platform is considered site-specific, we can analyze DST in terms of familiar tax policies, just as it is easy to distinguish between income-based and rent-based taxation of natural resources. By convention, income-based taxes are easier to implement, more resistant to tax planning and profit shifting, and provide revenue to the government earlier, whereas rent taxes are more challenging in theory and practice. In addition, in reality, income-based royalties, rental taxes and corporate income taxes are often used together. Corporate income taxes combine the advantages and drawbacks of the first two tax instruments, and therefore, the simultaneous imposition of these different taxes in the digital domain should be more acceptable than natural resource taxes.(Cui and Hashimzade, 2019)

However, the multilateral marketplace business model for digital platforms differs in many ways from natural resource extraction. The economic impact and welfare implications of taxing income from digital services depend on a range of factors. For example, when marginal costs are incurred in providing services to advertisers, both the platform and the advertiser are taxed on platform revenues, but consumers are not. Whereas, standard tax policies may result in countries deducting a portion of the tax from foreign users and then adding that tax to domestic users. Moreover, the uncertainty of the DST should not be a

reason for this policy to be opposed. Once platform rentals are considered location-specific, there are multiple business models that may be subject to taxation on LSR.

2.1.3.2 Differences between LSR and Destination Tax Theory

The idea of a platform's profits earned through a specific location is different from the idea of allocating the tax base of profits based on "destination". Depending on the business model, platform profits may be generated by producers or consumers. In fact, platform profits may come not only from business-to-consumer transactions, but also from business-to-business transactions and business-to-investor transactions, etc. (Thies et al, 2018).

The "profits" that we mentioned earlier for platforms actually come from specific locations rather than directly from the platform. While operating costs are an important element in determining whether a business is profitable, net profits after such costs constitute only quasi-rents (i.e., short-term economic profits conditional on prior investments), and pure economic rents can be determined only when prior expenses are taken into account.

First of all, we must be sure that the taxation of pure economic rents is not misinterpreted. In fact, however, the definition and criteria for determining economic rents have been a controversial topic in the economic literature. In this regard, Ricardo provides a more precise definition, namely that rent is the profit earned on a factor of production or resource in an amount that exceeds the full amount paid to provide that resource.

User data or activities engaged in are the key resources of the platform, and their non-competitive nature makes the platform free of opportunity costs. As a result, the shift of Ricardian rent collection from individual users to platforms has led to a justification for the taxation of such rents in the jurisdictions where the users are located. If the sovereign has the right to tax its residents, it also has the right to tax the (non-resident) platform on the rent, since the value of the rent is created by the individual resident.

In addition, if purely economic rents can be attributed to a particular jurisdiction, the government of that jurisdiction not only has the primary right to tax such rents, but also to maximize the tax on the rental income, which means imposing a tax on a different tax base, such as rents and taxes other than location-specific taxes. It is analogous to the royalties

that a country would reasonably levy on the extraction of mineral resources from its territory. In either case, the rent depends on the specific location.

2.1.3.3 Comparison with Resource Taxes

Two characteristics of digital platforms lead some to argue that DST may work better as an LSR tax than a resource use tax.

The first is that the marginal cost of platform revenues is typically (close to) zero, which allows for relatively less input spending and thus leads to smaller distortionary effects. Thus, the effect of a tax on income is close to that of a tax on profits. Moreover, the firm's closure decision will be determined only by average costs and not marginal costs. Since average costs are more predictable than marginal costs, it may be easier to design a tax on gross income that is similar to a tax on profits but at a lower rate.

In addition, the investments made by companies to capture platform rents are different from the upfront investments in natural resource extraction. Most investments are aimed at building market share and attracting users to the platform by subsidizing them, which also leads to two features of the current market, fragmentation and oligopoly. At the same time, it generates returns that benefit only private individuals or specific firms or consumers, not competing firms, leading to a likely inefficient untaxed equilibrium in platform competition. In this case, the DST can be used as a corrective tax in addition to a tax on rents.

The DST is similar to many existing taxes, particularly natural resource extraction taxes, and is not included in the scope of taxes covered by treaty, as is the case with resource royalties and rent taxes levied by many Canadian provinces. Jurisdictions that generate rents can cut them first, and other jurisdictions can then tax the remainder. The approach allows the DST to tax rents from one jurisdiction with little need for explicit coordination between that jurisdiction and other jurisdictions as to whether the rents will be overtaxed. However, when the DST is imposed on rents from multiple jurisdictions, there may be a need for coordination among the jurisdictions to ensure a reasonable combined tax liability (e.g., less than 100%). Indeed, income tax treaties are not the only or the best way to achieve such coordination.(Cui and Hashimzade, 2019)

2.1.3.4 Summary

LSR focuses on the physical presence, the source of payment and the allocation of profits between related entities, so it is usually hidden under the traditional international income tax model. In addition, LSR ignores the issue of how to allocate the rents generated by moving intangible assets. When the use of a technology is not competitive across multiple locations, it is both efficient and equitable to allocate the rents earned on the use of the technology at a specific location to that location.(Cui, 2019)

The principle of taxation of platform rents is different from and superior to the destination principle. First, platform rents can be generated at origin, destination, or residence, but the location of "user value creation" cannot be reduced to the location of the consumer.

Moreover, the taxation principle of platform rents is essentially a matter of equity, whereas the distribution of profits based on destination usually ignores equity issues.

As I understand it, the best role of LSR is that it can transform digital service tax into a generally accepted tax in each country. It does not give people a feeling of killing the rich to help the poor, because it makes a breakdown of business models. That means different business models correspond to different taxation methods, not necessarily to sanction large Internet companies. In the case of Uber, if a Chinese person uses the software to take a taxi in New York and the tax is collected, that tax does not subsidize the user's location, but should go to New York where the driver is located. In the case of Netflix, if a Chinese customer uses the platform to watch paid videos in New York, the tax should go back to the city in China, not New York. Using Google Ads as an example, if a Chinese customer uses Google Search in New York to watch an ad for a Japanese car company, the tax should go back to the city in China.

The DST would both generate tax revenue and minimize distortions and disruptions to business, although the specific measures are not perfect. At the same time, the implementation of the DST would have an impact on the market, and it could be seen not only as an effective tax on rents, but also as a corrective tax on an avoidance of excessive market access.

2.1.4 New Economic Geography

Economic geography can provide some explanation for regional development inequalities, it can provide moral support for the collection of local taxes, and it can make such taxes more acceptable.

The agglomeration effect of cities is common in international trade. For example, in 2000, North America, the European Union, and East Asia generated 35%, 25%, and 23% of the world's GDP, respectively. Furthermore, Hall and Jones (1999) observe that: “high-income nations are clustered in small cores in the Northern Hemisphere and that productivity per capita steadily declines with distance from these cores”. (Fujita and Mori, 2005)

If you look down at the Beijing area from the night sky, you will see that Beijing has a bright light, but around it, there is a circle of gray shadow, which has a non-academic name "Beijing Poverty Belt". In addition to the basic reason - the mountainous area - the poverty belt serves as an ecological barrier for Beijing, safeguarding Beijing's water security and preventing the development of many industries in these areas. At the same time, the administrative level of cities is not only reflected in their size, but also in their ability to obtain policies. Gunnar Myrdal proposes the polarization and diffusion effects in the urbanization process, under the role of pure market, once the development level and development conditions between regions appear disparity, then the areas that develop first will gradually accumulate resources and advantages, curbing the ability of cities that develop later to acquire resources. Diffusion effect means that in the regions with high development level, due to the increase of production cost and decrease of factor returns, the capital must be transferred to the surrounding areas in order to obtain higher returns, which finally becomes the common development of the whole region.(Fan and Hou, 2016)

Fujita and Krugman show that: “a monocentric economy is a spatial equilibrium provided that the population size does not exceed some threshold value depending on the structural parameters of the economy. In particular, as the population continues to grow, more cities will emerge to form an urban system”.(Fujita and Thisse, 2009)

In my opinion, cities that develop first and to a certain extent have a bad effect on cities that develop later, and legal systems should be established to protect the welfare of citizens in cities that develop later. Countries that provide services in the digital economy should be

compensated by paying taxes to the countries where the users are located. For companies that provide services in the digital economy, its polarization effect is very obvious and the diffusion effect is almost non-existent, so it is very unethical for such companies not to pay taxes. These companies just want to turn themselves into "hubs" and the user's city into a "poverty belt".

2.2 Tax loss

Relative to the various bills introduced internationally for Internet taxes, China is still dominated by traditional taxation methods, and there is no tax bill for the new situation, which inevitably makes the user's city lose a lot of tax revenue.

China and the world Internet have a barrier. China's local enterprises took advantage of their own advantages and policy advantages, defeated many foreign enterprises and laid the foundation for China's Internet advantage. Many domestic Chinese Internet companies are in monopoly position, so how much tax loss it will cause to the user's location, I will measure it with one business of IQIYI Company below.(RESEARCH, 2020)

2.2.1 IQIYI Model

Taking IQIYI as an example, it is an Internet entertainment provider that favors Chinese users, similar to The Netflix of China. One of the services it offers to regular customers is a membership service for paid programs, so that if a customer wants to watch content streamed on the IQIYI platform, he or she can simply pay the company directly through electronic payment on a cell phone. The transaction process results in the loss of this tax by the government of the subscriber's location, as well as a reduction in that type of local consumption by consumers, such as fewer trips to the cinema and no longer subscribing to cable TV services.

In January 2019 and January 2020, IQIYI released reports on the state of the online movie industry, which provide a breakdown of the geographic distribution of its subscribers. The IQIYI report shows that in 2018, 36% of IQIYI subscribers were located in 19 first-tier cities in China. The report in 2019 only discloses growth rates for Tier 5 cities in China from 2018 to 2019. Applying the growth rates to the 2018 distribution, it was able to calculate that the 19 first-tier cities accounted for 35.6% of IQIYI total subscribers in 2019.

We have access to back-end data for the IQIYI platform based on Muddy Waters Research and Wolf Pack Research. They collected 4-day DAU data for the same week in 19 first-tier cities in China from IQIYI back-end data provided by two ad agencies (3 weekdays and 1 weekend) in September 2019, as detailed in Table 1.

Daily Active User (DAU) is a statistical metric used to reflect the operation of a website, Internet application or online game. The number of daily active users usually counts the number of users who have logged in or used a product in a day (excluding repeat users). Due to the limitation of the statistical method, the average daily active user number used in the Internet industry refers to the average of the daily active users of the app during the statistical period.

DAU data can give some feedback on the number of paying users, and we first ignore the impact on IQIYI users' paying habits because of different cities (because IQIYI membership is a common cheap consumer product, charging about 30 RMB a month. There is little difference in the paying ability of people in different cities and different classes of people). As we can see from Table 1, the average value of Beijing users in the time period (including IOS platform and Adroid platform) is 2503, and the total average value of 19 cities is 24700. The percentage of Beijing users in 19 cities is 10.134%. IQIYI company is registered in Beijing in China, and all its tax revenue goes to Beijing. Looking at the data for the whole of China, we can conclude that the proportion of Beijing users to the national users is only 3.63%, a value that describes the proportion of paying users. In other words, but for this one business, Beijing is collecting taxes directly from 96% of the country's subscribers without paying a single cent of taxes locally to the subscribers, which is a huge tax loss for other cities.

If we consider the impact of cities on the habits of paying subscribers, we can see from Table 2, the approximate population of 19 first-tier cities in China as of 2021. It can be concluded that the population of Beijing accounts for 7.75% of the population of the 19 cities, the value is greater than 3.63%, indicating that the city of Beijing has a side effect on consumer payment, but it is not obvious. The value of 3.63% can describe the proportion of paying users.

Looking at IQIYI 2021 income tax annual report, it paid 96,545,000 yuan in taxes, and its total revenue for the year was 30.6 billion yuan, of which 16.7 billion yuan came from membership services, or 54.6% of the revenue. If we look at the percentage of membership services, its tax payment for that service is 52690000. Excluding the 3.63% of Beijing users, it means that the business alone, Beijing levies at least about 50580000 yuan of tax from users in other cities across the country. That is just one business of one Internet company in Beijing, which shows that the way for not taxing users in their location can cause huge tax loss and aggravate regional development imbalance.

https://xs.qianzhan.com/us/caiwuzhaiyao_iq.o.html

3. Test of Tax Form

There are two main types of effective state fiscal allocations. First, a strong central government centralizes the use of fiscal power. At the same time, it uses its position to regulate the spending of each local fiscal. In the second, power is delegated to the local level and local governments have a high degree of fiscal autonomy.

The purpose of the paper is to give China's Internet tax a realistic vehicle and to provide a theoretical basis for its actual implementation. Hence, although I want to keep the power of China's Internet tax at the user's location, is the approach I propose feasible? Would collecting Internet taxes at the local level be beneficial to economic growth? In this chapter, Meta-analysis is used to quantitatively assess this feasibility. Also, the following hypotheses are proposed.

H1: Giving greater fiscal autonomy to localities (Decentralization System) is more suitable for countries with a large gap between rich and poor and a large land area in each province

H2: Giving greater fiscal autonomy to the central government (Fiscal Federalism) is more suitable for countries with smaller wealth disparity and smaller land area.

3.1 Two Kinds of Fiscal Systems

3.1.1 Fiscal Federalism

The traditional theory of fiscal federalism is a normative theory. As a branch of public economics, it was originally proposed by Musgrave and Oates. That is concerned with the division of public sector functions and finances between different levels of government. According to Oates, "the basic theory of fiscal federalism lays down in a general way a normative framework for the division of fiscal functions at different levels of government and the fiscal instruments appropriate to perform those functions," emphasizes how taxes and expenditures can be divided among different levels of government to improve social welfare.

Tiebout developed the famous "voting with one's feet" principle, which states that the provision of local public goods by local governments contributes to efficiency by putting different local governments in competition due to the free movement of members of society between jurisdictions.(Tiebout, 1956)

The traditional theory of fiscal federalism emphasizes that too much decentralization may lead to a series of allocative distortions, regional inequalities, and fiscal instability.

Therefore, fiscal federalism theory distinguishes between what is a national public good and what is a local public good. In addition, fiscal federalism theory also analyzes the division of powers between ministry, expenditure, and revenue. The theory often involves the three major fiscal functions proposed by Musgrave: resource allocation, redistribution, and stabilization.(Xingyuan, 2011)

In the view of the first generation of fiscal federalism theory, the government is impersonal. It has no independent economic interests of its own and pursues the public interest. It is actually a means and a way for the social public to solve the problems of public goods provision and public needs satisfaction. Hence theoretically assuming the existence of a benevolent and efficient autocratic government, given the optimal amount of provision of a specific public good or service within the jurisdiction, a benevolent autocrat would be able to achieve the provision automatically.(Sen, 2011)

One of the most significant changes in the second generation of federalism developed since the 1990s has been the application of the public choice school of thought to the analysis of intergovernmental fiscal relations, viewing governments as self-interested "economic agents" with independent economic interests that seek to maximize budget size rather than social welfare.

3.1.2 Decentralization System (the System of Local Tax Collection)

The concept of local tax is relatively vague. The division of local tax in various countries in the world mainly includes the following types. First, the legislative power and the power of collection and management belong entirely to the local government, and the local government can decide the tax type, tax item, tax rate and calculation Tax basis, such as the United States. Second, the legislative power belongs to the central government, and local governments have greater authority over tax collection and management, such as Germany and Japan. Third, legislative power and basic management power belong to the central government, and local governments are only responsible for expropriation, such as Britain and France.(Chunyu, 2017)

For taxation, according to the division of ownership, taxes can be divided into central tax, local tax and shared tax. The ownership of tax revenue is defined by tax legislation to clarify the allocation of tax revenue among governments at all levels, which is collected by administrative agencies and directly stored in the treasury. Therefore, that is not separated from the enforcement or administrative scope of administrative organs.

In the paper, I define decentralization as the absolute tax autonomy of local governments, regardless of whether they have the power to make laws.

3.1.3 Examples and Comparisons

The way Switzerland allocates power to the local level through a system of powers. Local governments in Switzerland enjoy fiscal autonomy. Research has shown that income inequality can be appropriately reduced when power is decentralized to local governments, but when power is spread too thinly, inequality may again be exacerbated.

According to the theory, expanding the administrative power of each region, which means giving taxes to localities for collection, would help reduce inequality. However, this figure may not take into account the size of the country and the gap between rich and poor, since Switzerland is a small country and the differences in development between regions are not large.(Feld and Frey, 2021)

Vijay Kelkar presents three Indian imbalances. Vertical imbalance, where the amount of administrative power, such as taxation, varies between different levels of government. Horizontal imbalance, different political capacity of states, different implementation of the same policy in different places. Unbalanced development, with different levels of economic development among regions. He proposed New Fiscal Federalism, which is addressed through the Federal Finance Commission and Planning Commission, a central act with conditional transfers and a decentralized implementation program. It can be seen that for a large country with internal imbalances like India, combining local and central approaches is worth trying.(Kelkar, 2019)

It is worth noting that the fiscal system is different from the administrative system, and whether or not it is a fiscal federalism has nothing to do with whether or not the country is a federal system.

From the previous analysis, it is clear that there is no antagonistic relationship between these two tax systems, and both endorse fiscal decentralization. To facilitate the distinction and research, I will simplify and summarize the above fiscal views into two types. First, Fiscal Federalism, gives the central government greater fiscal autonomy and a strong central government centralizes the use of fiscal power. At the same time, using its position to regulate the expenditures of each local fiscal, according to the first type, Fiscal Federalism, gives greater fiscal autonomy to the central government and centralizes the use of fiscal power. Second, Decentralization System, gives greater fiscal autonomy to local governments, decentralizes power to the local level and gives local governments a high degree of fiscal autonomy, emphasizing independence and autonomy.

3.2. Meta-analysis of the Impact of Fiscal Decentralization on Economic Growth

In the analysis above, there is no clear boundary between the two systems, and it may not be too accurate to describe a polity in terms of a single federal fiscal system and a tax-sharing system. The analysis that follows uses the degree of fiscal decentralization to express it, rather than simply conceptualizing the two fiscal systems.

Fiscal decentralization refers to the transfer of fiscal authority and responsibility from the central government to local governments. In other words, in terms of revenue, it can be financed independently and autonomously without interference from the central government, and in terms of expenditure, it is delegated to localities while transferring responsibilities.(Min-kyung, 2014)

In the following, I will measure the impact of fiscal decentralization on economic growth by means of meta-analysis.

3.2.1 Basic Introduction of Meta-analysis

In economics, there are often many economists conducting independent studies on the same economic problem or the same hypothesis, but the results of these studies are often inconsistent or even opposite due to the differences in the backgrounds of the researchers and the perspectives and methods chosen to analyze the problem. Meta-analysis is a statistical method that systematically integrates the results of multiple independent studies conducted by different researchers on the same research topic, and quantitatively analyzes

and evaluates the results of these studies by analyzing the differentiated characteristics of each independent study. Meta-analysis has many advantages over traditional literature reviews, such as expanding the sample size, improving the effectiveness of statistical tests, and analyzing the variability of individual study results in detail. (Yuanpeng, 2013)

3.2.2 Analysis Process

3.2.2.1 Measurement Indicators

The relationship between fiscal decentralization and economic growth has been the subject of many empirical studies, but these studies have not shown consistent results. Some scholars argue that fiscal decentralization improves economic and administrative efficiency and that local governments can achieve economic growth by improving the efficiency of public services. Some scholars argue that fiscal decentralization leads to more corrupt practices, widens regional development imbalances, and reduces the ability to grow the economy. Many other scholars argue that there is no relationship between the two. Most scholars provide support for their theories through quantitative approaches.

According to the analysis of several literatures, scholars generally construct three values to measure the degree of fiscal decentralization:(Min-kyung, 2014)

Revenue Index: The proportion of local fiscal revenue to the total national fiscal revenue.

Expenditure Index: Local government expenditure as a share of national expenditure.

For the indicator of economic growth, it is generally measured by the total production of each region, which can be measured by Gross Regional Domestic Product (GRD) for unitary countries and studied by Gross State Product (GSP) for federal countries.

The above metrics are modified by different literature, but most cases do not depart from their core concepts.

3.2.2.2 Influencing Factors

The impact of fiscal decentralization on regional economic growth varies according to the characteristics of each country. A more representative example is the classification of countries into OECD and non-OECD countries according to their stage of development

and into federal and unitary countries according to their political system. I have added to this study influences such as population, land area, degree of industrialization, wealth gap, whether the data source is a stage of economic development, and whether the data source is a country. However, this is not all the possible influencing factors.

3.2.2.3 Literature screening

I obtained the literature in three ways.

1. I searched for "FISCAL FEDERALISM" or "DECENTRALIZATION", "ECONOMIC GROWTH" or "tax" and the corresponding Chinese terms in the databases of Web of Science, China Journal Full Text Database (China Knowledge Network) and Digital Journal Full Text Database (Wanfang Data). ", "ECONOMIC GROWTH" or "tax" and the corresponding Chinese terms, and got more than 250 related papers.
2. I searched the Connected Papers website for the above keywords to find relevant literature. This software will automatically find highly cited literature on the topic and its highly relevant articles.
3. I read articles on similar topics to find the original articles with their citation data.

I further screened the above literature according to the following 3 criteria.

1. The article needs to have data from quantitative analysis.
2. Detailed sample sizes and correlation coefficients needed to be found, r-values or F-values, t-values or chi-square values that can be converted to r-values.
3. The need to analyze the data with income and expenditure indicators.

The final inclusion of the reference was 19 articles.(zhang and Gong, 2005, Yushkov, 2015, Wasylenko, Rodriguez-Pose, 2011, Min-kyung, 2014, Lin, 2018, Lin and Liu, 2000, Ligtharta and Oudheusden, 2016, Ismail et al., Hanif et al., 2014, Hagen, 2014, GEMMELL et al., 2013, Devkota, 2014, Buser, 2011, Burret et al., 2018, Bodman and Ford, 2006, Belkovicsovaa and Boora, 2021, Baskaran and Thushyanthan, 2009, Blochliger and Egert, 2013), as detailed in Table 3.

3.2.2.4 Analysis Steps-Not Finished Writing

In this literature, we look for data that measure the relationship between fiscal decentralization as the independent variable and economic growth as the dependent variable.

1. Use excel to categorize and code the literature. The data cited in many articles span a large period of time and some factors of these countries are not easy to determine, so I constructed an "ideal country" as a comparison to facilitate the measurement of the concept of "size, strength and weakness". The ideal country should have the potential to become a developed country and its people's life and happiness should be guaranteed. It should also have the ability to be independent in the international and regional arenas. Therefore, I give its seemingly qualified data, GDP per capita greater than \$10,000, population greater than 50 million, land area greater than 322,600 square kilometers, industrialization in the top 20 and Gini coefficient less than 0.35.

That includes 1. information about the literature (author and year of publication) 2. sample size 3. income indicators 4. expenditure indicators 5. name of the country 6. whether it is a developed country 7. whether it is a unitary country 8. GDP per capita 9. population 10. National land area 11. degree of industrialization 12. Gini coefficient 13. whether it is an OCED member country 14. whether it is a WTO member country 15. whether the data collected are from a period of rapid economic growth, as detailed in Table 3.

Some data are comparison data and are assigned a value of 1 if it fits the description, 2 if it does not fit the description, and 3 if it is not clear.

2. Selection of effect size: The effect size of Meta regression analysis measures the sign and strength of the relationship between variables. The effect sizes are generally derived from the original correlation coefficient r , regression coefficient β , t-value, p-value, etc. of the economic relationships in each literature.

3. Effect size calculation: The study used STATA 17.0 software for meta-analysis. In this study, the Z value of the correlation coefficient r transformed by fisher was chosen as the final effect value. When reporting the results, the Z value is then converted to the correlation coefficient r value. A correlation coefficient r value is considered low when its absolute value $|r| < 0.10$, moderate when $0.10 < |r| < 0.40$, and high when $|r| > 0.40$. In the coding process, some literature did not report the correlation coefficients between fiscal decentralization and economic growth directly, but reported F-values, t-values, or Chi-

square, which we transformed into r-values using the correlation transformation formula as:

$$r = [t^2 / (t^2 + df)]^{1/2}, \quad df = n_1 + n_2 - 2; \quad r = [F / (F + df)]^{1/2},$$

$$df = n_1 + n_2 - 2; \quad r = [\chi^2 / (\chi^2 + df)]^{1/2}, \quad df = n_1 + n_2 - 2$$

4. When calculating the average effect size for the entire study, bias due to differences in sample size between studies was corrected by using the sample size used in each individual study as weights.

5. Model selection: Meta-analysis usually uses fixed-effects models and random-effects models. The biggest difference between the two is that the weight components are different. The fixed-effects model generally assumes that all studies in the meta-analysis actually have only one true effect size, and that differences in the effect size of each specific study are caused by sampling error. In contrast, the random effects model assumes that the true effect sizes of the studies are different. The inconsistency in the effect sizes of the studies is caused by the difference in the true effect sizes together with the sampling error. The different assumptions of the two models will make the estimation of intervals in the meta-analysis, the mean effect sizes, and the way the significance of the moderating variables is tested different. In choosing a model, if it is felt that the studies in the meta-analysis are identical in their effects and the total effect sizes calculated from the meta-analysis are only for the aggregate involved in the included studies and do not generalize to other aggregates, then a fixed effects model should be used. Conversely, a random-effects model is more appropriate when the meta-analysis includes studies in which subjects come from different sources and are measured differently. When there is good evidence that such differences will affect the results. In the final 19 included articles, the metrics varied and the subjects were from different sources (from different countries, regions, etc.), making it inappropriate to use a fixed-effects model. Therefore, the study used a random-effects model, which can take into account both intra-study and inter-study variation and can reduce the probability of making type I errors and better estimate the true effects.

6. Heterogeneity test: The purpose of the heterogeneity test is to test whether there is heterogeneity in the average effect size measured in the study. The effect size obtained from the observations in the meta-analysis contains the true effect size and the residuals,

which can lead to partial spuriousness of the observed effect size. If the spurious part exceeds the statistical range, then the effect size obtained across studies is heterogeneous, and this step is the heterogeneity test. The Q test for heterogeneity is generally used in studies with 2 pairs of effect sizes. The formula for the Q test is

$$Q = \sum_{i=1}^k w_i (Z_{ri} - SE)^2$$

where $w_i = n - 3$, Z_{ri} is the i th effect size, and SE is the mean effect size. When the p-value of Q-test > 0.1 , the data are considered homogeneous; when the p-value < 0.1 , the data are considered heterogeneous. Heterogeneity can also be assessed using the I^2 statistic test, which is given by the formula:

$$I^2 = \frac{Q - df}{Q} (Q > df) \text{ or } I^2 = 0 (Q < df)$$

7. Publication bias: Publication bias can be concluded if the published studies are not fully representative of the entire body of research in the field. The presence of publication bias implies that the field is not well researched and the results of the meta-analysis will be seriously affected by this, as it may falsely inflate the final calculated effect values.

Collecting as many unpublished studies as possible in the literature search session can effectively address the publication bias issue. In the meta-analysis of this paper, the funnel plot provides a valid preliminary test for publication bias, and if the effect sizes of the funnel plot are evenly distributed on both sides, the meta-analysis is considered free of publication bias, and conversely, publication bias is present. Also look at the use of Begg's test for publication bias assessment, when the p-value of Begg's test > 0.05 , then it is considered that there is no publication bias. The trim-and-fill method uses a cut-and-fill approach to distribute each study as symmetrically as possible on both sides of the mean effect size, and then re-evaluates the true value of the combined effect sizes. If the difference in effect sizes after trimming and filling is not significant, it is determined that there is no publication bias.

3.2.2.5 Analysis of Results

3.2.2.5.1 Results of Main Effects Test and Heterogeneity Test

The results of the random effects model indicate that fiscal decentralization and economic growth are positively correlated with moderate strength, when measured by income indicators.

The value of the correlation coefficient r is 0.11 (CI = 0.04 - 0.18, $p < 0.01$), where the results of the heterogeneity test are $Q = 181.55$, $p < 0.01$ and $I^2 = 86.23\%$, indicating that there is significant heterogeneity in the data, as detailed in Table 4 and Figure 1.

Fiscal decentralization and economic growth are positively correlated with low intensity under the expenditure indicator, with a correlation coefficient r value of 0.09 (CI = 0.01 - 0.17, $p = 0.02$), where the result of the heterogeneity test is $Q = 101.15$, $p < 0.01$ and $I^2 = 84.18\%$, indicating a significant heterogeneity in the data, as detailed in Table 4 and Figure 2.

3.2.2.5.2 Publication Bias Test Results

In the study, the results of the meta-analysis between fiscal decentralization and economic growth for revenue and expenditure indicators were tested for publication bias. The publication bias of this meta-analysis was examined using a funnel plot. The funnel plot Figure 3 and 4, shows that the literature included in the meta-analysis is not evenly distributed on both sides of the total effect, which indicates that there may be publication bias in this meta-analysis. To further clarify the presence of publication bias, Begg's test was then implemented. the results of Begg's test indicated that there may be publication bias for the analysis of income indicators ($p=0.040$), while there was no bias for expenditure indicators ($p=0.052$), as detailed in Table 4, 5, 6.

Considering that there is a certain possibility of publication bias in this meta-analysis, the Trim-and-fill method was selected to explore the effect of publication bias on the formation of meta-analysis results. From the results, Figure 5 and Table9, shows the total effect obtained from the random effects model did not change significantly after the treatment ($r = 0.08$, 95% CI [0.02-0.15]), indicating that the data with $r = 0.11$ were still available.

3.2.2.5.3 Moderating Effect Test-subgroup Analysis

This paper examines many variables of variation under the two indicators.

Under the income indicator, the results in Table 7, show that Developed, GDP per capita, Degree of Industrialization, OCED, Rapid Growth, and One Country are influential factors under the criteria of my classification. Among them, the correlations of Unitary state, Population, National Land area, GNI, and WTO are not significant and are not influential factors under the criteria of my classification.

The largest correlation between fiscal decentralization and economic development is found in the group of top 20 non-industrialized countries, $r=0.52$, $p<0.001$. The smallest correlation between fiscal decentralization and economic development is found in the group of countries with a land area greater than 300,000 km², $r=0.21$, $p=0.045$.

Under the expenditure indicator, Table 8 shows that Developed, Unitary state, GDP per capita, Degree of Industrialization, OCED, WTO, Rapid Growth, and One Country are influential factors under the criteria of my classification. Among them, Population, National Land area, and GNI are not significantly correlated and are not influential factors under the criteria of my classification.

The relationship between fiscal decentralization and economic development is most correlated in this group of the top 20 non-industrialized, $r=0.38$, $p=0.03$.

3.2.2.5.4 Meta-regression Results of Moderating Effects

In the paper, the meta-regression results of the possible influences under the two indicators are examined separately. Table 10, shows that under the income indicator, Population, Rapid Growth passed the significance level test ($p<0.05$), indicating that the factors have a significant moderating effect.

Under the expenditure indicator, Unitary state, WTO, Rapid Growth, and One Country passed the significance level test ($p<0.05$), which also indicates that the factors have a significant moderating effect.

3.2.3 Conclusion

From the viewpoint of revenue and expenditure indicators, giving more taxation power to local governments can promote better economic development. Therefore, from the point of view of economic development, it is a good choice to devolve the main power of Internet tax to localities.

From the results of the subgroup analysis, the wealth gap is divided into group 1: $GNI > 0.35$ and group 2: $GNI < 0.35$, $r_1 = 0.17$ ($Pr_1 = 0.274$) $<$ $r_2 = 0.25$ ($Pr_2 = 0.013$), However, the p-value for group 1 is greater than 0.05, which is not statistically significant, so it cannot be concluded that the size of the wealth gap can affect the relationship between fiscal decentralization and economic growth, as detailed in Table 7.

From the results of the subgroup analysis, Dividing the land area into group 1: land area greater than 322,600 square kilometers and group 2 land area less than 322,600 square kilometers, $r_1 = 0.21$ ($Pr_1 = 0.045$) $>$ $r_2 = 0.12$ ($Pr_2 = 0.127$), However, the p-value for group 2 is greater than 0.05, which is not statistically significant, so it cannot be concluded that the land area can affect the relationship between fiscal decentralization and economic growth, as detailed in Table 8.

From the above, I can only reject hypotheses 1 and 2. It may be that my grouping criteria and the limited sample data selected lead to the inability to analyze the effects of wealth gap and country size.

Looking at the two indicators together, as detailed in Table 7 and 8. I can conclude that non-OECD countries and unitary countries have some degree of influence on the positive relationship between fiscal decentralization and economic growth. China, with both properties, can also reflect that it is better suited to use fiscal decentralization to implement the Internet tax.

4. Tax Objects and Methods

In China, giving local governments the power to tax the Internet underneath is good for economic growth, however, the tax object is difficult to define, which is the reason why the title of this paper chooses some industries across regional enterprises instead of directly choosing Internet enterprises. That needs to be determined according to the business model, not the type of enterprise. Because not all Internet industries are taxed, for non-Internet industries are not taxed.

4.1 Tax Dilemma

As of December 2021, the scale of China's online shopping users reached 842 million. As a typical representative of the new digital economy, e-tailing continues to maintain rapid growth, becoming an important force in driving consumption expansion. In 2021, online retail sales reached 13.1 trillion yuan, up 14.1% year-on-year, of which the proportion of online retail sales of physical goods to total retail sales of social consumer goods reached 24.5%.

In the field of Internet purchase services in 2016, the market size of online car alone reached 171.22 billion yuan, the small-scale local life O2O market size reached 448.77 billion yuan, and the large-scale local life O2O market size reached 110.44 billion yuan. In addition, there are also Internet transaction types such as webcasting, online education, online medical care, and various types of sharing economy. Internet transactions have been fully integrated into the daily life of every consumer. (Haoyuan, 2017)

Internet transactions pose a great challenge to both tax collection and administration. For example, it is difficult for tax authorities to determine the tax payers of C2C mode online transactions and the tax jurisdiction of some Internet transactions is unclear. Whether it is tangible or intangible goods, B2C or C2C mode, it is difficult for tax authorities at all levels to realize the mastery of tax sources and specific transactions in China's existing collection and management system.

Just take e-tailing as an example, in 2014, the scale of tax loss in the e-tailing market in the seed country was about RMB 2014.83 billion to RMB 355.1 billion, accounting for about 1.77% to 2.98% of tax revenue, among which, the scale of tax loss in C2C mode e-tailing

was about RMB 109.781 billion, accounting for 0.92% of tax revenue. From 2004 to 2014, the scale of tax revenue loss in the entire e-tailing market was about 648.8 billion yuan to 993.9 billion yuan, of which, the scale of tax revenue loss in C2C mode e-tailing was about 413 billion yuan to 617.9 billion yuan. The value and proportion would be higher if we consider the possible tax revenue loss in other types of Internet transactions.(Haoyuan, 2017)

4.2 Internet Business Models

Internet transactions can be divided into two categories, B2C model and C2C model, according to the type of seller of goods and services.

B2C

The first one is B2C. That mainly refers to the merchant direct-to-customer transaction mode, and is the main mode of online shopping in China. Tmall Mall and Jingdong are the largest B2C online sales platforms in China, representing two modes of third-party transactions and self-operated transactions, respectively. Tmall only accepts legal grade general taxpayer qualified enterprises to be stationed, not individual industrial and commercial households, and requires real-name authentication. Jingdong Mall is a sales entity itself, which is no different from offline physical shopping. The tax form of the two is mainly VAT and corporate income tax, which is more easier to regulate. That can distinguish the company and customer transaction information and quantify the value of customers.

Game services and paid video and audio also fall under this model classification. The businesses can quantify customer value with the support of company data and bank data. Advertising is a special business under this model because there are difficulties in quantifying the value of advertising and it is difficult to quantify customer value if information from advertising companies is assessed unilaterally.

C2C

The second one is C2C, which mainly refers to the direct personal-to-person transaction model. Taobao is the representative of C2C transactions in China, with a market share of around 90%. Opening a store on this website only requires real-name authentication and no

offline tax registration, which is a transaction that is outside the tax regulation system. A large number of companies will disguise themselves as individuals to avoid taxation and it is not easy to distinguish the transaction information. Some scholars have measured the tax loss of these two business models, Tmall and Taobao. The results show that the VAT loss rate of merchants on Tmall platform is only 0.0772%~0.0799%, while the VAT loss rate of merchants on Taobao platform is 52.35%~82.27%, which is a serious tax loss. At the same time, the elements of C2C taxation are unclear, difficult for tax audit, and the tax information is not easily distinguished. The difficulty of tax audit and the form of taxation cannot meet the requirements of technological development have caused great taxation difficulties.(Caichang, 2017)

Internet car-hailing is also a typical C2C model of online transactions. Taking the Drip platform as an example, individual car owners provide vehicle and driver information, bind their bank cards and open third-party payments, and can start operating after verification by the Drip platform. After completing the transaction, the consumer pays the fee to the online cashier of DDT through online payment. DDT pays the remuneration to the account of the online car operator within a certain period of time. The driver can transfer to the bank card under his own name after withdrawing cash. Because each transaction is supported by geographic location and bank flow, this transaction type quantifies customer value.

4.3 Tax prerequisites and methods

From the above analysis, it is clear that the taxation method is divided according to the type of business of the Internet and it is not possible to comprehensively cover its internal business model with one system. However, it can be found that in the transaction process, commercial platforms and internet banks hold the flow of data and money, they are the core of the whole link, and the regulator can control the taxation by mastering these two elements.

At present, China's taxation system is in a transitional stage, from traditional taxation to Internet taxation. In general, taxation is mainly based on income vouchers and account statements. The taxable types of online merchants are mainly VAT and income tax. The actual taxation still adheres to the way of "tax control by invoice". The "tax control by

invoice" refers to the taxation department requiring taxpayers to use tax invoices in the process of production, operation and sales and to declare and pay taxes according to the invoices issued, so as to monitor and control the income and expenditure of taxpayers.(Haoyuan, 2017)

What is clear is that the traditional taxation method cannot meet the requirements of collecting Internet tax, which requires the establishment of a new department to set up a new system. First, a natural person tax identification number system should be implemented. A nationwide unified tax collection and management platform for natural persons should be established. A unique and lifelong tax identification number should be given to each natural person. The bank account number of their access to the online trading platform should be distinguished whether it is a company or an individual transaction. For individual users, a trading platform proxy tax deduction mechanism can be established. At the same time, the financial reporting system of companies should be revised. At present, the financial reports disclosed by the company only show his total revenue, which is outdated. The revenue of a certain company in a certain place needs to be quantified, for example, Tencent's revenue in all provincial administrative regions of China should be clarified. Internet companies have easy access to this data, but they are absolutely reluctant to share it. Once it is released, the plundering of the value of users in different regions will have to be made public, because it is hard for people to accept that they can earn handsomely in a certain place without paying any taxes.

After specifying the taxpayers, I propose the following two methods of taxation.

1. Local-led Internet tax: Requiring online payment companies and online banks to establish regulated data centers in each province. When a consumer in a certain place generates online consumption, the money is first credited to the account of this data supervision center and the data center distinguishes the registration place information of both sides of the transaction. If it is an inter-provincial transaction, a certain percentage of tax is deducted according to the type of transaction before crediting the account of the foreign company. The province is then based on user city to allocate the tax.
2. Central and local shared tax: Network payment companies and network banks are required to establish accounts in the central supervisory platform. When online transactions occur, users pay money into the central unified account. If it is an inter-provincial

transaction, a certain percentage of tax is deducted according to the transaction type and then credited to the company's account. The tax is directly returned to the user's city according to the transaction type.

4.4 Tax ratio

In my opinion, the percentage of Internet tax revenue needs to depend on the company's business model and its contribution to the user's location.

For example, game companies, if players want to buy in-game content, they can directly use online payment methods to make transactions, in which the user's city does not generate any revenue. The same is true for Internet advertising revenue, which collects information from local users and places ads without taxation. More importantly, being wary of the currently created metaverse concept. When people buy virtual real estate with no tax, it is no different than illegal money laundering. The business models, in which the company does not contribute anything to employment, production or city building in the user's location, are subject to heavier taxes, or a higher percentage of the local share of shared taxes.

If the business practice makes some contribution to the user's location, a lighter tax may be levied. For example, Internet car companies, although they provide services through online platforms, also contribute to local employment. The act of trading goods on e-commerce can also promote local logistics and provide local employment.

All in all, Internet tax is different from previous taxes. It needs to make segmented tax rules according to specific business types. It is worth noting that after collecting the tax. It is not necessary to fully compensate the government where the consumer is located for certain business types such as online cars and shared houses. It also need to subsidize producers, such as drivers and landlords, because they also enjoy a certain producer value. Of course, that needs to be quantified by building a more refined model.

5. Policy Discussion and Recommendations

China, whose official state path remains socialism, has seen its economy take off rapidly after reform and opening up. On September 23, 1985, at the National Congress of the Communist Party of China, Deng Xiaoping said, "In our reforms, we have always adhered to two fundamental principles: one is the predominance of a socialist, publicly owned economy, and the other is common prosperity " and "Encouraging some regions and some people to get rich first is also precisely to drive more and more people to get richer and to achieve the goal of common prosperity".

However, the market economy system has brought about a large gap between the rich and the poor, and instead of driving the poor, most of those who got rich first turned to form a monopoly class and increased the gap between the rich and the poor. The cities and enterprises developed by the policy tilt provide a lot of tax revenue for the country, but also deeply kidnap the country. They expand their own wallets by sucking the quality labor and natural resources from other provinces, but are a big disaster for the residents of other provinces.

This brings us to the question of whether it is ethical in a market economy for a strong central policy to decide which regions should be richer and which industries those engaged in should be richer. It is understandable that there is a division of labor among provinces within a country, such as northeast China as a major grain producing region and Shanxi as a major coal mining region. However, providing high-tech technological industrial support to developed regions on the one hand, and limiting grain prices and coal prices on the other, is tantamount to making some people work for others for free. Therefore, I do not recommend enacting any more artificial policies to classify certain cities as special economic zones.

In China and many countries in the world, in order to balance the development between regions, the central government does transfer payments to different regions. The Internet tax proposed in this paper does not take into account this impact. The main concerns and difficulties are as follows.

Firstly, the system of transfer payments is not open and transparent, and the state is not sure about the standard of transfer payments. The amount of transfer payments varies every year and the actual amount of transfer payments is not sure.

Secondly, as a unified country, there is a division of labor between regions. For example, northeast China, as a grain-producing region, is responsible for China's food security. The Yangtze River Delta region is responsible for upgrading China's manufacturing industry and paying taxes on it. But per capita wages, policy tilts, transfer payments, and welfare guarantees vary greatly from region to region. So how do we measure the importance of functions such as food security and manufacturing upgrading? Farmers in the Northeast, workers in the Yangtze River Delta, and programmers in Beijing are all part of the Chinese citizenry. They all contribute differently to the country's development, but the quality of life obtained through their work varies widely. There are individual factors in the difference of quality of life, such as the difference of education and work ability. However, there is more phenomenon in China that students who get master or even PhD in engineering, agriculture. Their starting salary is less than half or even one third of the starting salary of undergraduate students in Internet or finance industry. Therefore, in order to ensure fair and reasonable development, We can't rely solely on the market mechanism to regulate many factors such as regional division of labor, tax distribution, transfer payment, wage system, pension ratio, etc. should be considered in an integrated manner. The model is quite complicated, which is the reason why the paper only considers the way of collecting Internet tax from the perspective of tax distribution.

6. Conclusion

The paper assesses the feasibility of implementing a local tax on the Internet in China. Theoretical support was obtained by incorporating advanced international concepts. By means of quantitative analysis, we assessed that the business model of iQIYI paid membership videos generated a tax loss of about 50 million yuan in various regions of China in 2011, so as to portray the tax loss of not imposing Internet taxes at the local level and clarify the necessity of the tax. Then, we used meta-analysis to assess whether it is right to impose Internet taxes at the local level. The results showed that in terms of revenue indicators, giving localities more fiscal autonomy is beneficial to economic growth, with a correlation of 0.11, which is moderate. Based on the influencing factors, it is concluded that China is more suitable to adopt this method of taxation. The principle of tax sharing is also clarified.

Much of the literature on Internet taxes in China describes the need in general terms, without giving guidance on specific methods or evaluating the data. The paper suggests a way to implement an Internet tax in China, which means by giving more local autonomy to collect it. It also quantitatively portrays the tax losses of some Internet services to the cities where the users are located, quantitatively portrays the benefits of giving greater local autonomy in tax collection, and provides a method for collecting Internet taxes at the local level. The research in the paper provides practical theoretical support for the real implementation of related policies.

The geographical information of Internet data is more difficult to obtain, so the paper only analyzes specific business models. If I have access to the underlying data, I will portray more finely the tax loss caused by a certain Internet business to a certain city. For the model of Internet taxation, I only support taxation at the local level through the relationship between fiscal decentralization and economic growth, which is one-sided to some extent. The paper does not consider political factors, because there are also fiscal transfers and different positioning between regions in a country. If the factors are calculated, more complex research models and methods are needed, which also provide directions for my future research.

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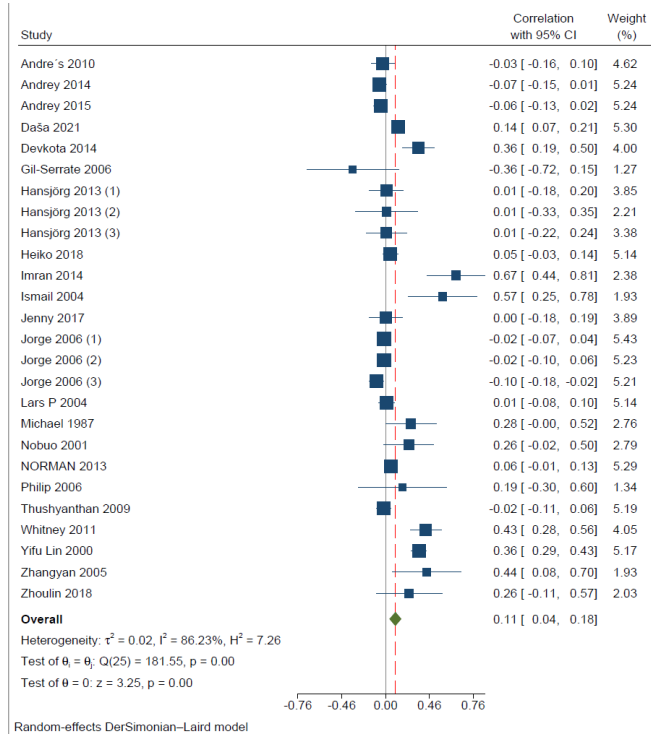


Figure 2:

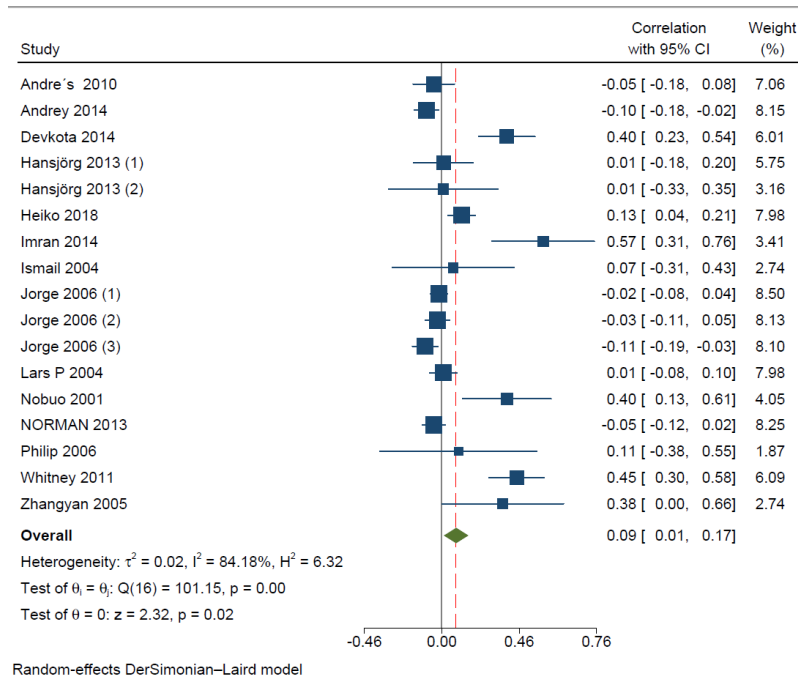


Figure 3:

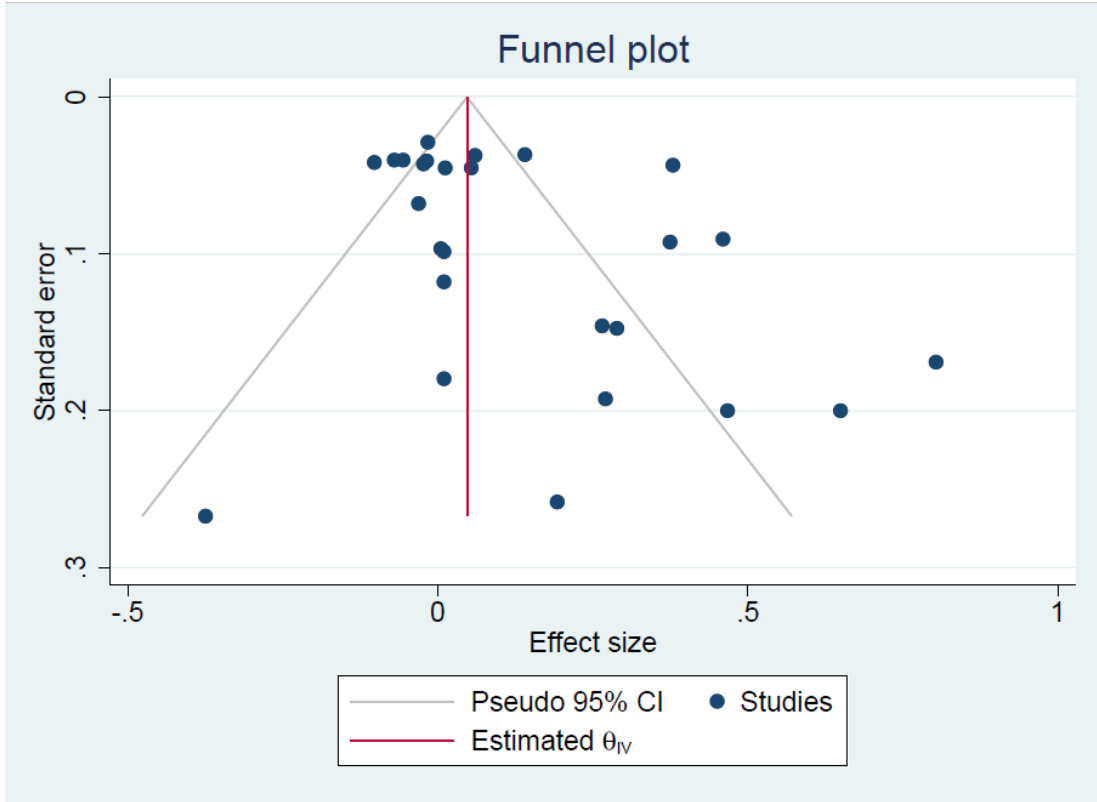


Figure 4:

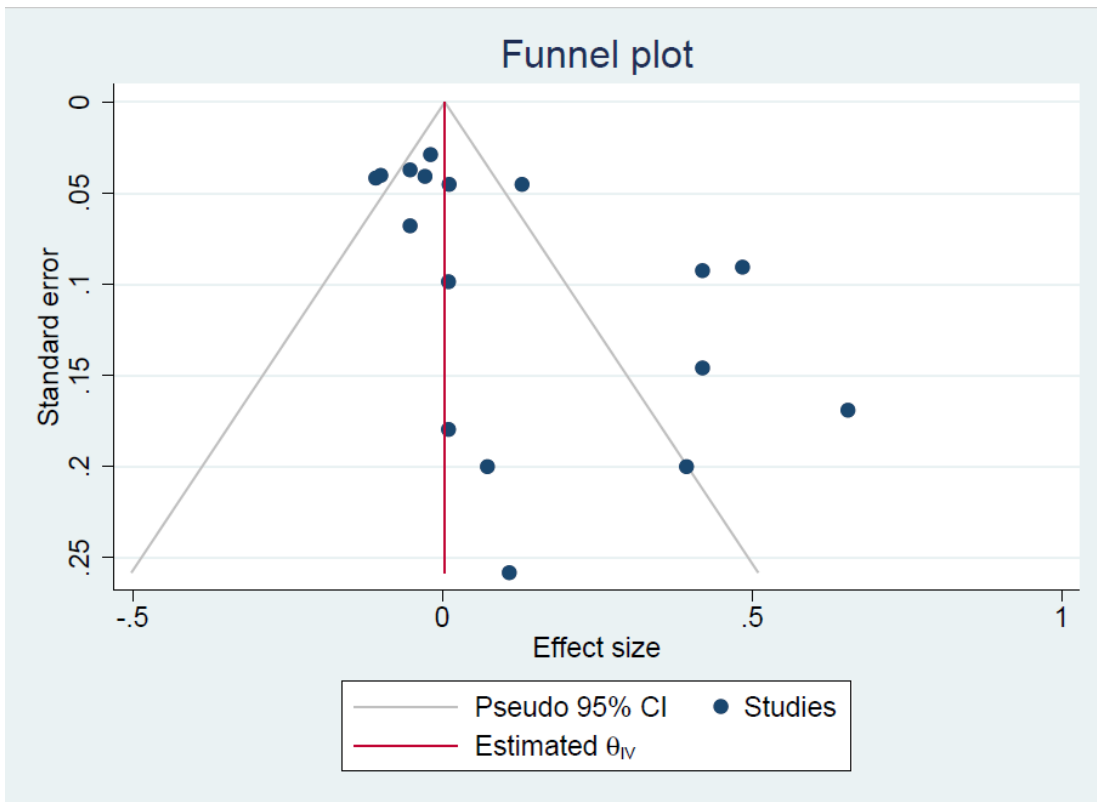


Figure 5:

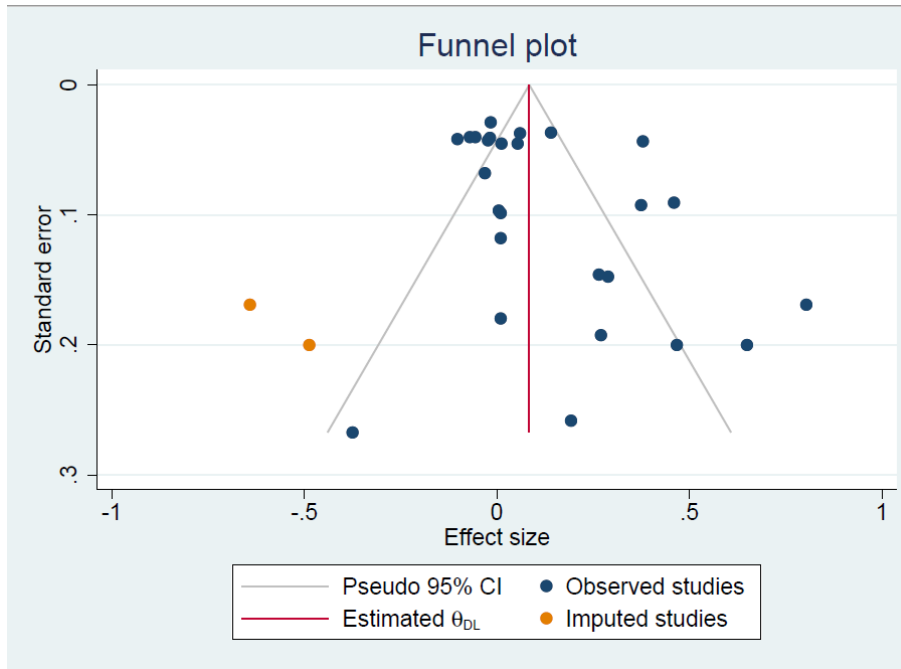


Table 1:

Average of DAUs for 4 Days by O/S and City				
Original Tier 1 Cities		iOS	Adroid	Total
1	Beijing	1,023	1,480	2,503
2	Guangzhou	743	1,203	1,945
3	Shenzhen	710	1,193	1,903
4	Shanghai	873	1,060	1,933
Sub-total: DAUs		3,348	4,935	8,283
New Tier 1 Cities				
1	Chongqing	445	1,290	1,735
2	Changsha	303	875	1,178
3	Chengdu	570	1,260	1,830
4	Dongguang	230	728	958
5	Hangzhou	203	358	560
6	Kunming	133	488	620
7	Nanjing	483	778	1,260
8	Ningbo	408	768	1,175
9	Qingdao	295	758	1,053
10	Shenyang	203	405	608
11	Suzhou	343	625	968
12	Tianjing	323	603	925
13	Wuhan	398	810	1,208
14	Xi'an	335	903	1,238
15	Zhengzhou	275	830	1,105
Sub-total: DAUs		4,943	11,475	16,418
Total: DAUs in 19 cities		8,290	16,410	24,700

Source: ad companies with access to iQIYI backend platform

Units: thousands

Table 2:

City	Population (Ten thousand)
Beijing	2188.6
Guangzhou	1881.1
Shenzhen	1768.2
Shanghai	2486.4
Chongqing	3212.4
Changsha	1023.9
Chengdu	2119.2
Dongguan	1053.7
Hangzhou	1220.4
Kunming	850.2
Nanjing	942.3
Ningbo	954.4
Qingdao	1025.7
Shenyang	911.8
Suzhou	1284.8
Tianjin	1373
Wuhan	1364.9
Xian	1316.3
Zhengzhou	1274.2

Table 3:

Author	Year	Revenue r	t	Exe r	t	t	n	Country	Developed	Unitary	GDP per	Population	Land area	Indus	GNI	OCED	WTO	Rapid	One country
Nobuo	2001		1.86				50	USA	1	2	1	1	1	1	1	1	1	2	1
Nobuo	2001				3		50	USA	1	2	1	1	1	1	1	1	1	2	1
Nobuo	2001					0.85	50	USA	1	2	1	1	1	1	1	1	1	2	1
Zhangyan	2005		2.47				28	CHINA	2	1	2	1	1	1	1	2	2	1	1
Zhangyan	2005				2.06		28	CHINA	2	1	2	1	1	1	1	2	2	1	1
Zhangyan	2005					1.15	28	CHINA	2	1	2	1	1	1	1	2	2	1	1
Ismail	2004	0.5713					28	4 countries	2	3	2	1	3	2	1	2	3	3	2
Ismail	2004			0.0727			28	4 countries	2	3	2	1	3	2	1	2	3	3	2
Andre's	2010			-0.052			220	21countries	3	3	3	3	3	3	3	1	3	3	2
Andre's	2010	-0.031					220	21countries	3	3	3	3	3	3	3	1	3	3	2
Zhoulin	2018		1.4503				30	CHINA	2	1	2	1	1	1	1	2	1	2	1
Data	2021	0.1395798					746	29 countries	3	3	3	3	3	3	3	1	3	3	3
Thushyanthai	2009	-0.023					554	23 countries	3	3	3	3	3	3	3	1	3	3	2
Whitney	2011	0.43		0.45			125	20 OECD-H	1	3	1	3	3	3	3	1	2	1	1
Gil-Serrate	2006	-0.358					17	Spain	1	2	1	2	1	1	2	1	2	3	1
Lars P.	2004			0.011			494	Switzerland	1	2	1	2	2	1	2	1	2	3	1
Lars P.	2004	0.012					494	Switzerland	1	2	1	2	2	1	2	3	3	3	3
Jorge	2006	-0.016		-0.019			1210	Unknown	3	3	3	3	3	3	3	3	3	3	2
Jorge	2006	-0.018		-0.028			606	Unknown	2	3	3	3	3	3	3	3	3	3	2
Jorge	2006	-0.102		-0.107			579	Unknown	1	3	3	3	3	3	3	3	3	3	2
NORMAN	2013	0.06		-0.052			726	23 OECD	3	3	1	3	3	3	3	1	3	3	2
Jenny	2017	0.005					110	56 countries	3	3	3	3	3	3	3	3	3	3	2
Philip	2006	0.1903		0.1077			18	18 countries	3	3	3	3	3	3	3	1	3	3	2
Yifu Lin	2000	0.362					534	CHINA	2	1	2	1	1	1	1	2	2	1	1
Hansjörg	2013						111	Unknown	3	3	3	3	3	3	3	3	3	3	2
Hansjörg	2013	0.01		0.01			106	Unknown	3	3	3	3	3	3	3	3	3	3	2
Hansjörg	2013	0.01		0.01			34	Unknown	3	2	3	3	3	3	3	3	3	3	2
Hansjörg	2013	0.01		0			75	Unknown	3	1	3	3	3	3	3	3	3	3	2
Andrey	2015	-0.0559					623	Russia	2	2	2	1	1	1	1	2	2	2	1
Michael	1987		2.01				49	Unknown	3	3	3	3	3	3	3	3	3	3	2
Heiko	2018		1.19		2.86		494	Switzerland	1	2	1	2	2	1	2	1	1	3	1
Andrey	2014		-1.76		-2.48		623	Russia	2	2	2	1	1	1	1	2	3	3	1
Devkota	2014		4.16		4.7		120	Nepal	2	2	2	2	2	2	2	2	3	3	1
Imran	2014		4.547		4.221		38	Pakistan	2	2	2	1	1	2	2	2	2	3	1

Table 4:

Type	Q value(P)	I square%	r	r CI	Total P	Begg's p
Revenue Index	181.55(<0.1)	86.23	0.11	0.04~0.18	<0.05	0.04<0.05
Expenditure Index	101.15(<0.1)	84.18	0.09	0.01~0.17	0.02	0.052

Table 5:

Begg's Test

adj. Kendall's Score (P-Q) = **94**
 Std. Dev. of Score = **45.34** (corrected for ties)
 Number of Studies = **26**
 z = **2.07**
 Pr > |z| = **0.038**
 z = **2.05** (continuity corrected)
 Pr > |z| = **0.040** (continuity corrected)

Egger's test

Std_Eff	Coefficient	Std. err.	t	P> t	[95% conf. interval]	
slope	-.0455276	.0533906	-0.85	0.402	-.1557203	.0646651
bias	1.929667	.9457934	2.04	0.052	-.0223551	3.881688

Table 6:

Begg's Test

adj. Kendall's Score (P-Q) = **48**
 Std. Dev. of Score = **24.23** (corrected for ties)
 Number of Studies = **17**
 z = **1.98**
 Pr > |z| = **0.048**
 z = **1.94** (continuity corrected)
 Pr > |z| = **0.052** (continuity corrected)

Egger's test

Std_Eff	Coefficient	Std. err.	t	P> t	[95% conf. interval]	
slope	-.1263199	.0534759	-2.36	0.032	-.2403011	-.0123388
bias	2.748812	.957309	2.87	0.012	.7083556	4.789267

Table 7:

Factor-Revenue Index	Type	Qw(p)	Qb(p)	l square%	r	Subgroup p
Developed	1	37.83(<0.01)	6.31(0.043)	86.78	0.08	0.284
	2	120.02(<0.01)		93.33	0.26	0.003
	3	18.21(0.05)		45.1	0.04	0.168
Unitary State	1	9.19(0.03)	3.31(0.191)	67.35	0.27	0.011
	2	50.32(<0.01)		84.1	0.1	0.091
	3	61.75(<0.01)		80.57	0.07	0.068
GDP per capita	1	24.92(<0.01)	9.73(0.008)	79.94	0.12	0.059
	2	111.80(<0.01)		93.74	0.31	0.003
	3	26.07(0.01)		57.81	0.01	0.774
Population	1	104.70(<0.01)	5.43(0.066)	93.31	0.29	0.004
	2	15.36(<0.01)		80.46	0.09	0.285
	3	51.99(<0.01)		74.99	0.05	0.164
National Land area	1	100.22(<0.01)	2.13(0.345)	93.02	0.21	0.045
	2	12.63(<0.01)		84.17	0.12	0.127
	3	61.77(<0.01)		77.34	0.06	0.075
Degree of Industrialization	1	84.01(<0.01)	12.94(0.002)	90.48	0.1	0.142
	2	5.62(0.06)		64.43	0.52	<0.001
	3	51.99(<0.01)		74.99	0.05	0.164
GNI	1	87.21(<0.01)	4.32(0.115)	93.12	0.23	0.026
	2	33.92(<0.01)		88.21	0.19	0.07
	3	51.99(<0.01)		74.99	0.05	0.164
OCED	1	34.10(<0.01)	14.20(0.001)	76.54	0.1	0.035
	2	111.80(<0.01)		93.74	0.31	0.003
	3	9.07(0.34)		11.77	-0.02	0.334
WTO	1	2.92(0.23)	4.93(0.111)	31.42	0.13	0.098
	2	84.96(<0.01)		94.11	0.29	0.032
	3	57.77(<0.01)		72.31	0.04	0.188
Rapid Growth	1	0.77(0.68)	49.93(<0.001)	0	0.38	<0.001
	2	6.90(0.03)		71	0.12	0.368
	3	82.32(<0.01)		76.92	0.06	0.062
One Country	1	125.41(<0.01)	7.99(0.018)	92.03	0.23	0.003
	2	24.40(0.02)		50.81	0.01	0.824
	3	7.99(0.02)		86.23	0.08	0.219

Table 8:

Factor-Expenditure Index	Type	Qw(p)	Qb(p)	l square%	r	Subgroup p
Developed	1	47.55(<0.01)	8.63(0.013)	91.59	0.16	0.077
	2	46.25(<0.01)		89.19	0.2	0.051
	3	1.10(0.95)		0	-0.03	0.15
Unitary state	1	0(<0.01)	6.34(0.042)	0	0.37	0.049
	2	52.90(<0.01)		88.66	0.19	0.02
	3	36.97(<0.01)		78.36	0.02	0.712
GDP per capita	1	40.67(<0.01)	9.30(0.010)	90.16	0.17	0.041
	2	45.20(<0.01)		91.15	0.27	0.103
	3	3.93(0.69)		0	-0.04	0.036
Population	1	33.37(<0.01)	4.07(0.130)	88.01	0.27	0.112
	2	16.22(<0.01)		87.67	0.17	0.069
	3	36.77(<0.01)		78.24	0.01	0.754
National Land area	1	100.22(<0.01)	4.06(0.132)	93.02	0.21	0.125
	2	12.63(<0.01)		84.17	0.12	0.069
	3	61.77(<0.01)		77.34	0.06	0.719
Degree of Industrialization	1	25.69(<0.01)	7.88(0.019)	84.43	0.1	0.164
	2	4.94(<0.01)		59.55	0.38	0.003
	3	36.77(<0.01)		78.24	0.01	0.754
GNI	1	17.16(<0.01)	5.35(0.069)	82.52	0.17	0.274
	2	26.4(<0.01)		88.64	0.25	0.013
	3	36.77(<0.01)		78.24	0.01	0.754
OCED	1	43.11(<0.01)	8.67(0.013)	86.08	0.12	0.103
	2	45.20(<0.01)		91.15	0.27	0.046
	3	3.57(0.47)		0	-0.04	0.334
WTO	1	3.64(0.06)	7.33(0.026)	72.54	0.24	0.089
	2	33.55(<0.01)		91.06	0.35	0.036
	3	31.27(<0.01)		68.02	-0.01	0.693
Rapid Growth	1	0.17(0.68)	29.01(<0.001)	0	0.44	<0.001
	2	0(<0.01)		0	0.4	0.004
	3	59.54(<0.01)		78.17	0.03	0.394
One Country	1	76.35(<0.01)	12.58(<0.001)	90.83	0.26	0.002
	2	4.35(0.82)		0	-0.04	0.014

Table 9:

Method: DerSimonian-Laird			
Studies	Effect size	[95% conf. interval]	
Observed	0.111	0.044	0.178
Observed + Imputed	0.084	0.015	0.153

Table 10:

Factor	revenue r	expenditure r
Developed	0.533	0.202
Unitary state	0.264	0.097
GDP per capita	0.221	0.108
Population	0.047	0.101
National Land area	0.263	0.079
Degree of Industrialization	0.485	0.327
GNI	0.125	0.226
OCED	0.408	0.262
WTO	0.127	0.032
Rapid Growth	0.016	0.009
One Country	0.105	0.01