China's Experiences in Estimating the Informal Economy

Abstract: According to the principle of informal economic accounting in SNA (2008), the informal economy covers both legal activities and illegal activities. From the perspective of actual statistical significance, the accounting scope of China's informal economy refers to the economic activities of units or individuals that are not registered in government regulatory authorities. This thesis, based on this accounting scope, discussed the statistical data and accounting condition of China's informal economy.

1. Definition of the informal economy in China.

When the informal economy was elaborated in the SNA 2008, it was not said that the informal economy must be illegal or underground. The SNA 2008 states: For those who do not have formal jobs but engage in some form of monetary economic activity, it is of analytical importance to be able to measure this part of economy. This part of economy is known as the informal economy. The informal economy may be observable or unobservable, but it does not mean that they are illegal. For example: street vendors or online ride-booking service drivers may be unobserved and informal, but they are likely to be legally taxed. The production of informal economy has developed in varying ways in different countries. The informal economy is likely to be encouraged if the motive is simply to survive or just to achieve a flexible working style.

At present, the latest edition of CSNA2016 in China does not discuss the informal economy as a separate chapter. However, in the actual accounting of China, the informal economy mainly refers to the economic activities of

units or individuals that are not registered in the government regulatory authorities. Usually, the informal economy in China mainly has the following characteristics: (1) Low organizational level, small scale. (2) Operating under conditions of low capital and low level technology. (3) Most of the employees are in the state of unstable employment and lack of social welfare protection. (4) Not registered in the regulatory authorities.

Under normal circumstances, when the production and operation scale of a unit or individual reaches a certain level, along with the increase in the number of employees and the elevated demand for welfare protection, these units or individuals will have to go to the relevant departments to register and eventually transform themselves into formal economic activities under regulation and supervision. Therefore, the informal economy in China has very small scale now.

2. Scope of the informal economy in China.

Several issues must be clarified in determining the scope of accounting for the informal economy.

2.1 Informal economy and illegal or underground economy are of two different categories.

Informal economic activities are not necessarily illegal or underground. People engaged in informal economic activities may not consider to evade tax and social insurance, or violate labor law and other laws and regulations. For example: street vendors may be unlicensed to sell fake commodities, which may belong to illegal economic activities. But it is probably that they

sell genuine goods purchased through legal channels and pay taxes, which is a legal economic activity; or perhaps because of the small scale of such trafficking, it may be temporary or accidental and thus still remains untaxable now, which also belongs to the informal economy. At present, in the accounting of China, we usually **only consider those legal informal economic activities.**

2.2 Informal economy and the unobserved economy are also of different categories.

Many informal economic activities are observable, but with the emergence of various new economic forms, a considerable part of informal economic activity is unobservable. For example: A household rents a room to a guest for one night or several nights, which is an informal economy. If the household completes the transaction through an internet rental platform, the value of the rental activity may be observed in the electronic record of the platform and thus observable. But it may be privately completed through some social media or acquaintances, which is just a temporary or accidental sales behavior. So it is both informal and unobservable. In the current accounting of China, we have tried to integrate observable informal economic activities into national economic accounting through multisource data collection.

3. Informal economic accounting of China

There are two main types of informal economic output and value-added accounting methods, namely direct investigation method and indirect estimation method. Direct investigation method refers to the method of directly collecting data on informal economic output by organizing sample

surveys, censuses or questionnaires. Indirect estimation method refers to the method of constructing a calculation formula or model to estimate the output of informal economy through variables related to the informal economy.

In the accounting of China, the former method holds dominant position. In order to conduct better accounting for informal economic activities, we have divided it into two main parts: Observable informal economy and unobservable informal economy. The former has been given full consideration in China's national economic accounting, while the latter is the direction of our future efforts.

3.1 Observable informal economy

By collating China's informal economic activities, we find that most of the economic activities are observable. The observable informal economic activities are classified into the following:

a. Retail service

Observable informal retail services primarily complete transactions through e-commerce platforms. The Internet platforms such as TAOBAO and JD that we are familiar with provide more convenient trading channels for some unregistered units or individuals. For example, individuals do not need to register in the government authorities, but they can run an online store in TAOBAO and sell their own self-made handicrafts.

At present, the NBS has established an *Internet economic statistics system* (IESS), which includes quarterly and annual surveys on major e-commerce trading platforms. All transactions completed on these platforms will be recorded.

NBS can get the transactions data of Internet-based retail service through the IESS survey. All the data can be used to calculate the volume of total Internet-based retail sales. But there is still a problem. The IESS surveys are conducted from the perspective of e-commerce platforms, although the total amount of all transactions can be clearly recorded, it is difficult to distinguish which of them are transactions completed by formal registered units and individuals, and which are unregistered informal transactions. If we want to estimate the volume of informal retail service, some other data must be taken in the consideration.

On the other hand, through comprehensive surveys and sample surveys, the NBS can obtain data on sales of all formal retail activities, no matter the transaction completed by using the Internet platform or not. The survey respondents need to provide the information of their Internet-based transaction. Through these surveys, we can roughly know the Internet-based transaction volume of formal retail activities. Then, NBS can combine the IESS surveys data to estimate transaction volume of informal retail service.

b. Transportation service

Most informal transportation services are also completed through the Internet platform. Just like Uber which is familiar to the public, China also has many Internet travel platforms such as DIDI and YIDAO, which provide users with transportation services through various mobile APPs. These travel services include formal economic activities, such as regular taxis and shared bicycles which have already registered in the government department. There are also some informal economic activities, e.g., anyone can register on these trading platforms with a simple application, then he can become a driver, and provides transportation services and takes orders

through the platform's APP to complete the transaction.

Through IESS surveys, NBS can collect the information form dozens of transportation service platforms. We can obtain the transaction amount data of all Internet-based transportation services, and can use the data of the transaction amount to calculate the output.

But the above problem surfaces again. These transaction data include both formal transportation activities and informal activities. We cannot distinguish them. Although we can get the quantity data of individual registered vehicle through various platforms, since the vehicle quantity data of each platform is nonadditive (because each individual can register simultaneously on multiple platforms), it is difficult for us to estimate the volume of the service provided by these individuals.

If we can further refine the statistical system for the travel platform, and the travel platform to be surveyed provides the transaction amount data completed by the individual registered users, then on this basis we can further calculate the output scale of this part.

c. Accommodation services

In China, there are also a large number of accommodation services provided by individuals. Most of them provide their spare housing or rooms to tourists for short-term use through the Internet platform. These accommodation services are also observable.

Depend on the IESS survey, NBS can get the transaction data of this part of informal activities. It should be noted here that there are more cases of distribution in the sales of these platforms, i.e. the same housing resource will appear in the transaction records of different platforms in the same date. In order to avoid the double counting brought by the distribution, we mainly count the data from the source trading platform. The transaction amount includes both the final income of the payees and the commission income of all distributors. Therefore, these informal accommodation services in China are also observable and the output can be accounted.

d. Households and business services

Informal households and business services have many types, including but not limited to the following tutoring services, housekeeping services, health services, audio-visual services, art design services, creative services provided by individuals without registration. Some of these services are completed by the two sides through the consultation and private relations, and some of them were completed through the contract signed by both parties on the Internet platform. The former is usually difficult to be observed. But for the latter, the basic situation of these economic activities can be observed and grasped with the Internet platform records. Through the IESS surveys, NBS have acquired statistical records on the transaction amount of education, medical care, network audio-visual service and art design services. Then, we can estimate the output of this part of the activity. However, this part of the transaction includes both the formal economy that has been registered and the unregistered informal economy. It is even difficult for the platform to distinguish the identity of the service provider. Therefore, we can keep the observation records for the informal economic activity, but it is difficult to specifically estimate its volume.

e. Street vendors

Although with the strengthening of government management and the ease of handling various registration procedures, China's unregistered street vendors have been decreasing, but they still exist in small numbers across the country. NBS carries out economic census every five years. During the census year, we take sample survey of all individual practitioners appearing on the street, whether or not they have registered in the government. Based on this sample survey data in the census year, we can extrapolate the output of these formal and informal activities separately in the routine years.

3.2 Unobserved informal economy

In addition to the observable informal economy mentioned above, there are currently some economic activities in China that we can hardly observe. One of the most noteworthy is the transactions completed through social media.

With social media prevailing in our lives, more and more transactions are completed through social media, like chat groups, wechat moments. However, this part of the transaction includes both registered formal economy and unregistered informal economy, and even the platform can hardly distinguish the identity of the service provider. These transactions can happen in everyone's life, but it is difficult to obtain information about these transactions from any channel, and they are more difficult to be captured and observed than traditional mobile vendors. According to some scholars and researchers' estimates, the overall volume of transactions in these activities is not large, but it is increasing year by year.

In summary, on the basis of economic census and *Internet economic statistics system* (IESS), a considerable part of China's informal economy can be observed, and the volume and growth rate of this activity can be grasped. However, it difficult to observe emerging transactions completed through social media, and with the development of digital economy, this

part of activity may grow year by year, which will challenge our accounting for the informal economy.