Classification Principles for Intermediaries in Services Transactions

33rd Meeting of the Voorburg Group on Service Statistics

September 24-28, 2018
Rome, Italy

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This paper was initially presented to the United Nations Expert Group on International Statistical Classifications as part of a discussion on the need for a revision to ISIC Rev 4 taking into account the growth of activities related to digitization and e-commerce. (UN Document No. ac340-10) The only change from that document is the correction of a typographical error on page 4 and the inclusion of this cover page. The Expert Group accepted the conceptual guidance for classification of the activities and the use of the general questions and terminology in the absence of a revision to ISIC.

*The views and opinions presented in this paper are of those of the author and do not represent the views or opinions of the United States Census Bureau, the Office of Management and Budget Economic Classification Policy Committee, or any other group that the author may be affiliated with.
Intermediaries in the Provision of Services and Classification in ISIC

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UNSD Expert Group on International Statistical Classifications
September 6-8, 2017
New York, New York

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There has been an increasing amount of discussion recently about “retailing of services” or reselling of services and the implications for the structure and content of ISIC. This brief note presents a framework to consider these discussions and attempts to evaluate the current structure and concepts in ISIC vis-à-vis the rise of intermediaries in transactions for the provision of services.

To begin a discussion of various aspects of intermediaries in service transactions, a definition of a service is needed to bound the discussion. The 2008 System of National Accounts provides a baseline definition of a service.

“Services are the result of a production activity that changes the conditions of the consuming units, or facilitates the exchange of products or financial assets. These types of service may be described as change effecting services and margin services respectively. Change-effecting services are outputs produced to order and typically consist of changes in the conditions of the consuming units realized by the activities of producers at the demand of the consumers. Change-effecting services are not separate entities over which ownership rights can be established. They cannot be traded separately from their production. By the time their production is completed, they must have been provided to the consumers.”

The SNA further provides guidance on the character of services with, “the [changes] usually become embodied in the persons of the consumers or the goods they own and are not separate entities that belong to the producer. Such improvements cannot be held in inventories by the producer or traded separately from their production.”

In order for a transaction for a service to occur, there must be a consumer and a producer who willingly interact to implement and receive the change. The service is the change itself rather than some intangible good. Because the service is a change, it cannot be inventoried and is not conceptually the same as a good. Yet, services are provided, transactions for services occur regularly, and aspects of the entire process can be separated out to specialist providers even if the service cannot be traded separately from the production.

Service providers use a variety of methods to increase awareness of their capabilities for change. In the past, this took the form of specialized symbols such as barber poles or signs prominently posted to advertise the service. Other options for advertising were available in the form of telephone directories or advertisements in newspapers or other publications. As long as there have been specialized providers of services, the challenge has been to generate awareness of their existence and find consumers for the services. Advertising agencies create promotional campaigns using multiple avenues including print, video, and digital tools.

The growth of digital technologies and rise of the Internet have not changed the definition of a service or the need to bring together producers and consumers. These developments have broadened the reach of a service provider and potentially involved new players or economic units in the process. This in turn has allowed even greater specialization on particular aspects of service provision. One area of specialization is third party intermediation in services transactions.

**Retailing of Services in ISIC?**

Relying on ISIC and the definition of a service from the SNA, the term “retailing” when applied to services creates definitional problems. Retail trade is defined as, “...the resale (sale without
transformation) of new and used goods mainly to the general public for personal or household consumption or utilization, by shops, department stores, stalls, mail-order houses, hawkers and peddlers, consumer cooperatives, etc.” in ISIC Revision 4. ISIC further goes on to explicitly include certain agency services in retail trade with the inclusion of retail commission agents and retail auctioning houses. ISIC limits retail trade to transactions related to goods. Retail trade does not include agency or intermediation in services transactions.

However, there can be third party intermediation in services. Everyone has seen a gift card for a spa, restaurant, or movie theater. These gift cards are often sold in stores along with goods. Similarly, there are numerous phone “stores” that sell telecommunications services on a commission basis. While the SNA definition of a service requires that production of a service and consumption of a service are simultaneous, payment for service can be separated temporally from the provision and consumption of the service. Accounting rules may vary but current contingent liabilities, treatment of breakage, and recognition of revenue address the problem for accounting purposes. In addition, a variety of steps that bring together the producer and the consumer of a service can take place away for the actual service. In concept, these transactional services, intermediary services, or agency services are very similar to the margin services in wholesale trade and retail trade. Perhaps that is why the term retailing services has crept into use and created confusion for industry classification. Goods and services are not the same. Bringing together producers and consumers to facilitate service transactions is excluded from retail trade by definition in ISIC.

**Outsourcing Part of the Production Process in Services**

It might be more useful to define “retailing” of services as the outsourcing of part of the production process of services – the transactional aspects that are necessary for all market based activity - bringing together the producer and consumer of service and facilitating a transaction. When a barber pays for advertising time and space, he has outsourced his outreach. If a barber pays for credit card processing services, he has outsourced part of the financial aspect of the transaction. The barber still affects the condition of the customer who requested the haircut.

ISIC Rev. 4 provides clear guidance on the classification of principals and contractors involved in outsourcing. Principals that outsource part of the production process are classified in the industry of the complete process. Contractors are classified to the industry of units producing the same services on their own account. The barber who outsources advertising and payment processing is still classified as a barber in ISIC.

ISIC Rev. 4 does not have a generic industry or section for agency or intermediation between service providers and service consumers that is equivalent to wholesale trade or retail trade. ISIC does however have separate classes identified for specific transactional services when they were identified as significant. For example, ISIC includes a class for travel agency activities because they were significant and fairly homogeneous. Similar industries were created for real estate agency, stock brokerage, and reservation services. However not all agency services are specifically identified. In practice, the selling of a service on a commission or fee basis is classified to the industry of the service being sold if there is not a separate class in ISIC. For example, selling lottery tickets on a commission basis is classified with gambling activities and selling transit passes on a commission basis is classified with transit services. This results in a way to connect the outsourced activities with the service being performed. This worked well historically for separately identified classes and defaulting the others to the industry of the primary
activity. The Internet and growth of digital technologies has increased the number and variety of intermediaries in service transactions. The question for the Expert Group is whether or not a comprehensive review of this treatment is needed in ISIC at this time.

When considering classification, a review of the activities actually undertaken remains necessary. First, is the unit actually providing the service? If yes, they are classified as directed in ISIC. Second, is the unit only providing intermediary or agent services? If yes, the unit is classified to the industry of the specific activity (e.g., travel agent, reservation service) or to the industry of the principal (e.g., telecommunications for selling telecommunication services on a commission or fee basis). Measurement is a separate but critical issue. Agency or intermediary services should be measured on a net output basis. The goal is to properly relate the margin or net output for these services back to the actual service provider to accurately measure output. The actual providers of the service should be measured as gross output. When determining the actual activities performed, the classifier must understand the business model. If a unit is taking on what I will call capacity risk, they are classified to the same industry as the principal but care must be taken to avoid double counting. If they are only providing agency or intermediary services, they may or may not be classified to the industry of the principal. That will depend on whether or not ISIC has a specific intermediary industry. The business model and employment relationships can also impact a classification decision. If independent contractors are actually providing the service, rather than traditional employees, that must also be considered. The following examples illustrate the issues in more concrete terms.

Examples considering principles, contractors, and Intermediaries in services

Accommodation services

There are a number of different models in hotel intermediation. One model simply provides access and intermediation – essentially a centralized reservation service. This model is generally known as the agency model. In this case, ISIC has identified hotel reservation services in 7990, Other reservation service and related activities. Another model is the merchant model where the intermediary not only makes the reservation but also processes payment, often times in advance. They are not taking capacity risk but they are also not providing any actual accommodation service. Once the stay is completed, the hotel bills the merchant (because the customer has already paid). Many on-line travel agencies work on this model and are classified to ISIC 7911, Travel agency activities.

There is also a less common model where a third party “reserves” capacity and takes on economic risk for the reserved capacity. In this case, the actual accommodation is provided by a hotel but the third party hotel site pays even if the rooms are empty. This is a case where there is a contractor/subcontractor relationship and the outsourcing model would result in both the third party and the hotel being classified to ISIC 5510, Short term accommodation activities. Care must be taken to measure the two activities appropriately. The third party should be measured as a margin (or in other words, a net basis) and the hotel should be measured based on the payment from the intermediary to the hotel when “reserving the space. This would be a gross measurement. Consider the following hypothetical example.

A hotel has 100 rooms. Rate is $100 per night. Average Occupancy is 60%. Expected average revenue = $6,000 per night.
The hotel sells 25 rooms to a third party for $40 per night. The risk of unused capacity now is shifted to the third party. The hotel itself receives $1,000. Total expected average revenue for the hotel is now $7,000 per night. This unit would be classified to ISIC 5510 rather than reservation services because they take on the capacity risk and subcontract the accommodation service to the hotel.

The third party now has 25 rooms per night. At a 50% occupancy rate and a charge of $75 per night, they bring in $937.50 per night but pay out $1,000 per night. If they get to 60% occupancy, they bring in $1,125 and make a small profit.

In a situation with a third party that accepts capacity risk, the industry revenue must be measured based on the particular roles of the units measured to avoid double counting. To get the value of the actual accommodation service provided for of the 25 hotel rooms, you must add the margin of the third party to the actual accommodation cost of the hotel ($35 for the intermediary services plus $40 that was actually paid to the service provider). Going back to the SNA definition, the service is produced and consumed at the same time. If gross measurement is used for both, the revenue per room across both parties would be $115 – overstating the actual accommodation service by $40 per room. In the case of a loss by the third party for a particular night, compilers must be ready to accept a negative margin or new negative revenue from one provider. There is also the potential to have very similar activities classified in two different industries based on the assumption of capacity risk.

Another example would be a company that brings together property owners and potential short term renters looking for an alternative to a traditional hotel. The company provides outreach and connections, reviews, etc. but never provides any actual accommodation services and carries no capacity risk. This type of Internet operation would be classified to reservation services rather than accommodations. The owners of property that are providing the actual accommodation services would be classified to accommodation services.

Deal of the day Internet sites

The growth of deal of the day sites has created classification confusion in ISIC. The business model for deal of the day sites generally does not involve accepting capacity risk and the services provided are commission based intermediary or agency services. The problem with deal of the day sites is that they can cover sales of a wide range of services. Typical offerings include repair services, food services, experiences such as winery tours or ecotourism activities, etc.

If an intermediary or agency service provider were to focus on a single type of service, the classification would be relatively straightforward. Using normal ISIC procedures, the largest component or type of service would guide the classification. For these deal of the day sites, this would result in a very unstable classification because the mixture of services and therefore the ultimate classification can change daily.

In ISIC 8211, Combined office administrative service activities, a range of daily activities are grouped together to address a similar problem. These services are often provided together but each individual service is classified elsewhere. A similar treatment could be applied to these deal of the day sites would result in them being classified to ISIC 7990. Other reservation service and related activities. This would be a new interpretation and may not be the optimal default decision. This would result in a potentially large variety of services including tours, goods, food services, repair services, etc. being grouped
together as reservation services because a single activity or multiple activities are not easily or consistently identifiable. These services would be measured on a commission or fee basis as would the rest of the industry. The combination of reservation services that already exist in 7990 creates problems for allocation of these agency/intermediary services back to the actual services, but a larger combination does not necessarily create any new problems.

Another alternative could be to revise either ISIC, the CPC, or both to further identify specific service intermediary activities (e.g., intermediary services for repair services).

Third Party Fulfillment in Retail Trade

Although this final example is not directly related to intermediary activities for services, there is substantial growth in agency or intermediary services that result from outsourcing e-commerce services in retail trade. Large retailers with significant e-commerce infrastructure are performing the selling activities for other retailers on a commission or fee basis. Known as fulfillment services, this can include all aspects of the retail trade transaction except the actual buying and selling of the goods. A growing percentage of sales through large Internet retailers are actually owned by third party retailers.

Much as described in agents/intermediaries for service transactions, third party merchants outsource a large part of the services that are traditionally part of the retail trade margin. Fulfillment services can include a wide range of activities. In some cases, the e-commerce site is providing only transaction related services. That is they highlight a product on their website, collect and process payment, and forward the information to the third party retailer for actual fulfillment. The third party retailer receives payment (less commission) and then pulls the item, packages the item, and ships the item to the customer.

In other cases, the e-commerce site undertakes all of the functions except ownership. A third party merchant’s goods are housed in the e-commerce distribution center. When an order is received, the item is picked, packed, and shipped by the e-commerce provider. The ownership and obsolescence risk remain with the third party merchant. This is another case where technology has allowed further separation or disaggregation of the production function to specialized units that can take advantage of economies of scale and particular expertise.

Retail trade is generally measured as a margin for output purposes. The providers of outsourced these retail trade services would be included in the same industry as the merchants. In fact, ISIC specifically includes these services within retail trade.

Considerations for Classification

At the 2013 Expert Group meeting, UNSD provided an overview of issues for ISIC Rev. 4 that included a section of “retailing of services”. The issues included several proposed criteria for classification of units providing outsourced activities to services providers. They included:

- is there a clear predominance of one single service being “sold”?
- is there a mixture of goods and services (or intellectual property products) being “sold”?
- is the unit engaged in processing the payments for the goods or services “sold”?
- is the unit actively engaged in delivering the product to the user (in whatever suitable)?
- is the unit actively engaged in marketing/advertising the product?

- is the unit receiving payments from customers or sellers of the product, i.e. to whom is the “sales” service provided?\(^\text{vii}\)

A possible refinement and clarification of that proposal could include the following:

- Does the unit in question perform the actual service? For example, are they providing the actual accommodation, equipment being rented, or change in the condition of the object of the service? If so, classify to the activity as described in ISIC and measure the gross amount received for the provision of the service. In the case of accommodation services, the unit described here would be classified in ISIC 5510.

- Does the unit subcontract the actual service but assume or accept “capacity risk” or transactional risk for the provision of the service? For example a provider that subcontracts the accommodation services to a hotel but pays for the night even if the room is open. If yes, classify to the activity of the capacity or transactional risk and measure the net amount received for the provision of the service. In the case of accommodation services, the units described here would be classified to ISIC 5510.

- Does the unit not perform that actual service but rather only provide intermediary or agency services in the transaction (e.g., a booking service that provides reservation services to hotels but has no capacity risk and operates on a commission or fee basis)? If yes, classify to the ISIC class of the activity being performed – if there is a separate class in ISIC for the agency service or default to the ISIC class of the change producing service if there is not a separate class and measure on a commission or fee basis. In the case of accommodation services, this unit would be classified in ISIC 7990, Other reservation service and related activities or 7911, Travel agency activities, depending on the business model used.

These classification criteria are generic but should work for a common implementation of activities outsourced as part of the production process of services. They should also work for outsourced or agency services in retail trade where the ownership change of the goods being sold would be determinant rather the change producing service.

**Conclusion**

These examples show how the current structure of ISIC can handle intermediation in service transactions when consistently reviewed under the framework of outsourcing already defined in ISIC. Classification decisions must be made based on the actual activities that are being undertaken. Similar analysis can be done for many things in the “gig” economy. Ride sharing services generally perform no transportation. Capacity matching services for construction equipment or agricultural equipment generally do not rent their own equipment directly and only bring together equipment owners and potential users of the equipment. There is no separate industry for arranging for the rental of machinery by others, so these types of activity would be classified in the rental industries and measured on a net basis.
The current industry structure of ISIC is arguably adequate overall to address the expanded use of agency or intermediary services related to service transactions.* The current treatment does highlight the importance of correct analysis of the activities performed and proper measurement. That can result in the need to separate gross and net transactions based on the outsourcing within a given ISIC class.

The Voorburg Group addressed this topic, described as reselling services, in Sydney, Australia in 2015. The papers reflect work on accounting standards, BPM6, and merchanting of services from the Meeting of the Group of Experts on National Accounts. The discussion did not reveal any major shortcomings in the structure or content of ISIC Rev. 4 but did focus on the measurement problems.

This discussion may need to move away from terms such as retailing, reselling, merchanting, wholesaling, and inventory risk that are appropriate to goods but not to services. Goods and services are very different concepts. In services more than ever, look to the activities when making a classification decision.

Additional information and reading on the topic of measurement can be found on the Voorburg Group website under the topic of reselling services.iii There is also some relevant information on bundling – where classification and measurement can come into play. Guidance on bundling was produced by the Voorburg Group at the 2016 meeting in Zagreb, Croatia.

*Arguments can be made that individual industries are needed for specific growth areas following current practices. Alternatively, changes in products in the CPC could be used to address these intermediation services. The intent of this statement is that the problems are not of sufficient size to require a revision of ISIC for this reason alone at this time. Guidance can be provided through a variety of methods including rulings, classification guidance statements or other methods requested by the Expert Group. This does not mean that new specialized classes for specific intermediaries might be created as part of a wider revision of ISIC. Another option is to create a single industry for these commission services in a future version of ISIC. If there were a single class for agency services for all service transactions, classification would be easy but the ability to assign or relate the agency services back to the individual services performed would be compromised. Another option would be to create numerous industries to address specific agency services – an expansion of the existing practice of identifying important cases such as travel agencies or real estate agencies. This however would become quite cumbersome and potentially lead to units moving between industries fairly rapidly depending on short term capacity constraints and outsourcing decisions. The Expert Group may wish to discuss the stability of individual classes in a dynamic, changing economy, as well as consider significance criteria for identifying separate new classes in ISIC.

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ii Ibid. paragraph 6.19
iv Ibid. page 188
v Ibid. pages 139-141