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GOODS, SERVICES AND THE EXCLUDED THIRD

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GOODS, SERVICES AND THE EXCLUDED THIRD

Introduction

1. The economic development and in particular everything that can by summarised under the heading of globalisation has reshaped the relations in the world economy. Within enterprise groups this has been an ongoing process for decades and often takes the form of outsourcing. But outsourcing need not only be between domestic and foreign parts of the same group of corporations it is also used to reduce the costs of production by outsourcing parts to any foreign producer which has lower labour costs. The question, besides practical measurement problems, is if the principles of the SNA are enough flexible to take account of these seemingly new relations and if we are able to structure them in a meaningful way to serve the analysis or if there are fundamental needs to modify the SNA. The work done under the supervision of the UNECE points in the direction that it would suffice to make smaller adjustments in the activity classification. But in spite of the thorough work behind the Guide to Measuring Global Production (GMGP) some questions still remains to be straightened out.

2. The Guide suggests that the use of intellectual property products (IPP) should be given the same status as inputs in goods for processing as material inputs have in the guidelines on outsourcing in ISIC rev. 4. By that change activities only engaged in R&D and business management would be classified in manufacturing if the product at the end of the global production chain is an output of manufacturing. This is one option we have to discuss but we also have to regard weather this is the intention with the activity classification or if there might be other solutions to the problem put forward which gives similar result as the one proposed in the Guide. Other issues touched upon in the GMGP are the identification of the economic owner of IPP (chapter 3 and 4) and the distinction between goods and services. This is the main problem in relation to what is discussed in chapter 11 as merchanting of services.

3. In recent years the globalisation discourse has encountered the old issue of the principal difference between goods and services. This is most evident in ISIC rev. 4 where a new category has been included in order to separate intellectual property products (IPP). But the question has also been raised in relation to the changed recording of foreign trade for example goods which do not change ownership when they pass the border in order to be processed abroad and sent back as well as in the discussion of the concept “merchanting of services”. Regarding the characteristics of services as flows, an activity of change, there is an intrinsic logic contrast related to the change of ownership or moving around the service during the time the process is going on. Normally we think that it is the output of an activity which is moved not the activity in itself. But, as will be shown, the view taken depends on the perspective the observer has in relation to the service provided.

4. The first question to be asked is of course what purpose the division of products into goods, services and possibly a third category serve. Is it possible and meaningful to make such a grouping of products? In popular descriptions it is certainly declared that the advanced industrial nations have left goods production behind as the main source for the national income and instead are dominated by the

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service industry. In such a context the economies of the world might be divided into those who mainly generate income from areal activities (agriculture, forestry and fishing), mining and manufacturing or service activities. These popular descriptions usually lack the critical distance necessary in order to identify the problems such simplified descriptions are struggling with.

5.  One problem is what we can call the problem of homogeneity, i.e. when a unit with mixed activity through outsourcing (within the economy) moves one kind of activity outside the unit. Then in the analysis, one category (for example goods) will be moved to the other category (for example services) in the statistics but not necessarily accompanied by an actual change in the composition of the national income. What’s happened is that a part of what has been disguised (services within goods production) now is visible in the statistics. The overarching principle that statistics shall be founded on homogenous production units can rarely be realised. A mix of activities is the normal case but the borderline is changing.

6.  The second problem is which view we should take on the interdependence between producers in the fabrication of finished products. It is the final output which, also in a global perspective, is interesting. Sub-contractors and suppliers to the end producers also include producers of investment goods, since these also are intermediary, and contribute to the final output of the production processes.

7.  As an example we can consider the services produced by units engaged in wholesale and retail trade. Nobody really demands these services other than indirectly through the goods we regard necessary in order to satisfy our ends and needs. What is then the point of describing the economy as service oriented because a majority gets their income from service activities when these only are provided in order to facilitate production, transport and distribution of goods. Without the fabrication of goods these services would be redundant. But, on the other hand, viewed in a global perspective it can be of interest to know which position an economy has in the international division of labour.

8.  It is in the same way with the global production chains, the position different units have in the fabrication has moved from the local to the global and when production is concentrated to a few nodes transports and distribution becomes even more important. In a recent example the production cost of an athletic shoe is only 20 percent of the market price, at basic prices that is. The remaining 80 percent are costs for services like marketing, transport and trade. But as long as productivity increases due to economics of scale enterprises can offset these costs and even more, so in the end the consumer goods prices can be reduced.

Well, maybe it is not our role as compilers of national accounts to question how it is being used to describe the economic development. First and foremost we should assist with transparent and coherent NA data to facilitate different kinds of analyses.

The problem

9.  The general problem can be described as the relation between the productive activity and its result or output to use a familiar concept. The question also includes how we should regard copyrights and other intellectual property products (IPP’s) and their position in the classification of economic activities by product. This will be discussed in relation to four case encountered in recent years. These cases are related to the division of products into goods and services in connection with global transactions.

10.  The changed recording of goods for processing abroad raised the question of what kind of product it is paid for by sending a semi-finished good and receiving a finished good. It is certainly called a processing service but recorded under the category of goods output, namely the good which is the normal output of the processing. In the changed recording introduced with 2008 SNA this implies a problem in the
volume estimate of GDP, if we do not use different price indices for the good and the processing service respectively. But, we will not enter into this problem in this paper, we only note that it probably exists.

11. Secondly, the "new" classification of goods and services as it is presented in ISIC rev. 4 is a step in the right direction. But, it is still unclear what the idea is behind including mass distribution of for example books in the output of publishing activity including film and video as well as computer software. It would probably have been better to isolate the output dimension to only include the activities leading up to the immaterial part of copyright protected output and only include the copyright (IPP) and services in connection to the copyright.

12. The third example relates to the recommendations in ISIC regarding outsourcing. If an enterprise orders goods from a foreign contract producer without placing raw material or semi-finished goods at the disposal of the contractor, then the enterprise (principal) is not part of the fabrication process and should be treated as a trading unit (case of merchanting). But, if the enterprise, on the other hand, buys the input material for example in the same economy as the contract producer is located, without any further processing and puts it the disposal of the contractor then it is no longer a case of merchanting of goods. In the case of outsourcing the ownership of raw materials and semi-finished goods is crucial for the activity classification.

13. The final example is a rather novel one and found in chapter 10 “Merchanting of services” of the GMGP. We have noted that within some global enterprise groups the provision of services directly from a foreign subsidiary to a foreign customer when it comes to payment takes the way over the domestic parent corporation. The parent receives the order from the customer and puts it through to the subsidiary. Afterwards the parent sends the invoice the customer but only pays a part of the received payment to the subsidiary.

14. If we follow payments this looks like the parent is buying a service from the subsidiary which is sold to the customer without transformation. In this case we observe what is taking place from the perspective of monetary transactions (payment perspective). But, if services, according to the common understanding, cannot be transported this has to be something else and then the question arises, what are we actually observing when we speak of “merchanting of services”? Maybe the question arises only because we do not entirely understand the business model of global enterprises.

**Classification of research based units units**

15. The rule in classification of units is that value added for different kinds of output should be used to decide on the activity the unit is mainly engaged in. The idea is that the work or activity done within the unit is also what the unit get paid for. If it is possible to address different costs to the each of the products fabricated the value added should give a good picture of the activities undertaken. Gross value added corresponds to the combined activity of labour and machinery (assets) which we usually think of as the activity of transformation leading to a specific kind of output.

16. An example is an R&D establishment for which we can identify at least two kinds of output; one is the creation of the immaterial output, the IPP (patented or not) and the other is the use of the IPP to create a flow of R&D capital services to the other establishments within the enterprise. The gross value added of the service flow must be the larger of the two, unless the R&D assets (IPPs) is sold separately, since it has to cover all the costs of the establishment including the consumption of the R&D asset, whereas the creation of the R&D asset only need to cover the costs of its creation.

17. The main part of the employees might be engaged in the creation of the R&D assets (production for own final use) but the establishment will nevertheless be a market producer because the value of the
assets created are the starting point in the next step, the production of the R&D-service flow which, in the NA sense, is what the unit gets paid for. This value added (gross) is larger since it covers all labour and capital costs the unit has and not only those related to the creation of the IPP.

18. If the establishment is engaged in the production of goods based on the R&D assets the classification will be more problematic since we then have to know to what extent the R&D asset is used within the establishment in relation to external use. The problem lies in estimating the value of ‘sales’ when it is used by other establishments within the same enterprise without any corresponding payments.

19. In practice we do not use value added since it is hard not to say impossible from the official accounts of enterprises to relate input costs to different kinds of output. In order to do this we need additional information which certainly exists within the enterprise but rarely is available for use at NSIs. Instead we focus on the number of employees and wages as the main source for the activity classification work. In problematic cases we might even have to make a model of the activity structure based on a combination of sources like structural business statistics and R&D statistics.

**Goods, services and intellectual property products**

20. The Task Force on Global Production has also discussed the delineation problem of goods and services mainly in relation to merchandising of services. We can extend the issue to other communications techniques like remote work stations and digital streaming services. The question is whether in the light of the new techniques it is necessary to reconsider the borderline between goods and services. I do not think so but regarding IPP there might be a need to make some clarifications in the product classification.

21. All in all I think the concept of services works well. The narrow definition is that a service can be used to process and transform goods and assets but it is not possible to store or transport the service in itself. If this is true we cannot speak of merchandising of services since storage and transport are essential for trade. So, in what sense can we speak of a service being exchanged between two units but without being consumed, either as input or as final consumption?

22. There is at least one case in the SNA which is of special interest. That is when an immaterial asset, patent or copyright, is used to create a stream of services (cf. 2008 SNA, § 6.211). If the stream of services is bridging a distance this would violate the narrow definition of services. So, in order to preserve the definition of services we might have to redefine this kind of activity. But making a parallel with the renting of cars would actually also do the job.

23. The renting of cars is treated as production of as service and it consists of at least two parts, one at the establishment of the operational leasing enterprise and one as a capital service at the establishment of the user. The owner does this by placing the asset at the disposal of the user. The service is produced at two different locations. In this sense there is no transportation of service output. The same goes with IPP if we regard the copy of an IPP to be placed at the establishment of the user and producing a capital service but the IPP still owned by the unit ‘renting it out’.

24. Maybe this is not the best way of dealing with the issue but since it is the way of understanding operational leasing in the SNA, that a service is produced, we can make this parallel. In the case of IPPs we do not face any indivisibility problem. This means that we can create a new asset by partitioning part of the IPP and sell the new asset instead of a service. For long term transferable licences for the permit to use a natural resource we actually do this instead, by treating it as a sale of an asset rather than property income (rent), even though the capacity of the asset is limited (for example the radio spectrum).

25. The income from sales (except by wholesalers and retailers) of the right to use copies is treated as output of the same activity creating the IPP. But instead of treating this as a service, according to the
current SNA, it should be treated as a third category of output, the right to use IPP, which is included in the same product group as the IPP itself. The right to use is an immaterial asset in itself derived from the ownership of the IPP. This could then be seen as another way of partitioning the IPP for the benefit of other users than the owner. Since long term leasing has economic consequences over more than one production period this should be recognised in the balance sheet.\textsuperscript{2} If the right to use is for a shorter period of time than one year it should be treated as intermediate consumption and otherwise as gross fixed capital formation.

26. The distinction between the output of IPP (asset) and services (flow) creating the IPP can also give us a clue of where the production of services is taking place. With access to the Internet individuals located at different places can work together and develop common software. But in doing this they download a local copy of the latest version which they modify at the local workplace and later on uploads to the common storage. The service is produced at the local workplace where the programming engineer is physically working with the software and the result, the addition to the inventory of unfinished IPP, is transferred to the common storage. The challenge in this case will be to allocate ownership of the common inventory to the units involved.

27. The main problem in connection to globalisation is that the payment might be for something different than what the work is giving as result. Depending on how the production is organised the costs of R&D might be paid by selling the final good where R&D and other IPP are embodied instead of selling R&D as a separate output. In the case of merchanting of services the parent unit in the enterprise group is organising the production and receives the payment for the work done. But only a part is transferred to the IPP producing unit (sub-contractor) located in another economy. By following the transactions of money it might seem like a case of merchanting but this can be erroneous. If the payment is made for the right to use a copy of an IPP the IPP service, like operational leasing of cars, is produced at the location of the customer.

**What are services?**

28. We can make a distinction between the output definition and the activity definition of services. The output definition can be found in the usual separation of goods and services. It regards what is being transformed rather than the transformation process in itself. If it is raw materials or semi-finished goods being transformed into semi-finished goods or finished goods respectively then the output is a good. A service on the other hand does not change the good in a physical meaning, but if this is the case it is mainly to restore the good to a former state for example by repairing it.

29. Services can be broken down into transformation services and marginal services. Transformation services changes the good of the buyer (for example a broken car), the mental state (education, entertainment) or the physical state (hair cutting, work out) of the buyer as well as in space (transportation). Marginal services on the other hand are intermediation activities of goods and assets/liabilities without the objects of the transaction being changed.

30. The output definition fits with the narrow definition of services which means that services are used up at the same time they are produced. Services can in this sense not be saved or transported in order to be stored and sold at a later date. It is only the result of the services that can be stored and thus transported or transacted to another unit. As an example of this we can take immaterial output like IPP.

\textsuperscript{2} This is actually what should be understood by the new recommendations in IFRS for leasing
31. We can also expand the definition of transformation services to include transformation of raw materials and semi-finished goods being further processed by the service bought. In this sense we have a broader definition of services which corresponds to the activity classification (cf. table 1 below).

32. In order to have a deeper understanding of what services are we can illustrate this by an example. Let us take an example outside the area of globalisation. A person going to a concert is buying a ticket. The ticket gives the individual the access to a seat in the concert hall at a specific date and time. The ticket is a sign of payment for this right to access the venue and consume the service provided. In most cases the ticket can be transferred to others maybe with age restrictions etc. and in this sense the ticket is a short term contract.

33. When the orchestra starts playing the service is being produced and when the music is over the service has also come to an end. The result of the service can be recorded or transmitted in live or later on demand. We should note that both recording and transmission involves more than the original service of the orchestra and the recording as well as the transmission are different products than the original service.

34. The point is that, the buying of the ticket is not the same as consuming a service and reselling the ticket is not trading in services but instead the trading in a permission to have access to the concert hall when the musical service is provided. And we can even go further by stating that the buying of a music CD is not the buying of a service but a good. Thus, it is not a use of a service in the NA when we afterwards at home listen to the recording, we are actually consuming a good.

Products under copyright and patents (IPP)

35. The live recording made with the permission of the orchestra and the owner of the notes and lyrics can be made into a copyright protected output of the concert. This is an IPP which can be used to make CD copies sold to customers and/or transmitted to listeners by use of a medium. The same goes for computer software and in this case the physical appearance might be a digital file transmitted through the Internet to a subsidiary corporation in the enterprise group. The code in the software is the result of the programming service and this is stored on a disc or file. The medium carries the code between the seller and the buyer after the programming service has been produced.

36. So, what are the characteristics of an IPP? The IPP is an immaterial product (asset) which means that anyone who gets access to the IPP in its physical appearance will be able to use it for whatever purpose. Therefore an exclusive right to use the IPP is needed in order for the owner to make economic use of it. The IPP must be a combination of at least these two characteristics otherwise it will not be an economic asset. When an IPP is transacted both these characteristics has to be transferred but the right to use can be partitioned at least in time and space. We can in this sense split the IPP into several parts which all are created on the basis of same immaterial asset.

37. In this meaning IPPs are something different from the activities (services) creating them. Copyright to a specific immaterial product is the result in several activities which for the moment are located in different parts of the activity classification (ISIC). The most obvious is of course R&D (M.72) where the IPP often leads up to a patent. In the publishing and recording activities J.58 and J.59 we have the clearest correspondence between IPP and the end result of the activities through the copyright protection for using the output (book title, music recording, computer software etc.).

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3 A service involves at least labour but normally also some assets partly used up in the process but in this case we have neither. According to the CPC it is an IPP which will be challenged later on in the paper.
38. But IPP under copyright is also the result of activities in the specialised design activity (M.74.1) and literary and artistic creation (R.90.03). The outputs of the last activity are among all the authors’ literary manuscripts and originals of painters and sculptors which are protected from illegal use by copyright.

39. Maybe there is a need for a separate third category in the activity classification by product in order to make a clear distinction between IPP and services on the one hand and material and immaterial products on the other hand. By such a separation it should be obvious that products that can become assets are transferable and distinct from services which never are.

40. Making copies of IPP is a transformation service but in order to store and trade with the copies they have to be put on a physical medium and as such we treat them as goods. In some cases the copy and the medium are wholly integrated. This is the case for books and DVDs. I therefore argue contrary to ISIC (and CPC) that copies of the original therefore constitutes the category of goods. The distribution artistic work can also be through services like the reading by authors live and transmitted with broadcasting services and art gallery as well as art museum services.

The borderline between R&D, development and branding

41. The production process, from the original idea to the finished product in the hands of the customer, consists of several steps. In the figure below these steps have been grouped into its main parts (the upper part). The idea behind this is the same as the one in the GMGP but has also a division of the process steps related to activities which is of importance for the separation of goods and services. In such a representation of processes it is only the systematic parts of the innovative stage which are included and these correspond to R&D.

42. When it comes to research and development work, the delineation is not particularly clear. According to ISIC R&D are experimental activities in order to produce new knowledge in different areas. But the borderline between R&D and applied as well as commercial development is not obvious enough. Besides basic research R&D also includes research which has a broad spectrum of uses. But when we narrow the scope to product specific development it is an activity which is performed in relation to other activities in the establishment producing the product. The reason to this is not only commercial but also that a close relation to the productive activity is needed to have the necessary understanding of the problem and customer needs to formulate the objective of this tighter focused development. In order for this kind of development to be classified as R&D the improvement of the product has to be substantial. An example might be the invention of the turbocharger but not the gradual improvements of its performance and areas of use. Put more generally, R&D does not include the gradual improvement of fuel consumption of engines and their performance even if the power train producer gladly announces that their latest engine is revolutionary.

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\footnote{Cf. figure 1.1 in the GMGP}
43. We need a clear borderline between the industrial part of development which has to be included in the manufacturing activity and what should be included as R&D and can be localised into specialised R&D establishments and not necessarily have to be part of the enterprise. They should be able to act on their own by commission of external customers. In the figure below the part which is included in the manufacturing activity is named non-experimental development and design. The dotted line indicates that the borderline is somewhat unclear. It does not help very much to look into the Frascati manual either.

44. Regarding the problem to settle the borderline between experimental and non-experimental development this kind of borderline issue does hardly exist between industrial production and branding. An enterprise which turns to a contract producer with a request to produce a good, maybe based on market studies, where the main difference with other brands are the colour, form and the set of standard functions should be classified as a wholesaler. This is design within limits and a clear case of branding. As long as design and functions does not imply an higher degree of new development this will only be choices among known possibilities and is mainly a way to profile the products on the market. If, on the other hand, deeper technical knowledge combined with industrial skill is needed to make the prototype, then the development work and as a consequence the enterprise should be classified as part of the industrial activity behind the product.

**Factoryless Goods Producers**

45. The concept Factoryless Goods Producers (FGP) has emerged in relation to global production chains. But the fact is that this phenomenon is much older than the latest wave of globalisation in the world economy. As the concept implies a FGP has no goods production of its own but the FGP owns the exclusive right to the product manufactured by the contract producer. The FGP is acknowledged to be the only unit with a legal right to benefit from the sales of the product. It has this unique right in its power of patent holder or holder of the copyright to the product, or more generally is the IPP owner.

46. The production is undertaken by one or several a contract producers which have production cost advantages due to lower labour costs or in same case like refinery and milling economics of scale. The

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5 Cf. Guide to Measuring Global Production, pp. 18
finished goods are sold on the world market without being shipped to the economy of the FGP which implies that it at least for a substantial part of the output will not be recognised in the foreign trade statistics of the owners’ country. Above this problem it also looks like the FPG is buying and reselling a finished good without transforming it in any sense. From a superficial point of view this corresponds to what merchants do and this kind of revenue is therefore recorded as merchanting in the NA.

47. Some units of an enterprise group might be subcontractors to other units but without observable financial transactions which corresponds to the exchange of goods and services between the units. This can with some effort be overcome at the national level but when it concerns enterprises located in different economies the problem becomes worse. The same goes with the classification of units.

48. The real problem is that the recommendations on outsourcing do not take into account the practical difficulties in establishing the kind of activity the FGP-unit is undertaking. The use of transfer prices and invoices can lead us astray if we only use such information. During the last decades several manufacturers have been outsourcing production, in part or entirely, to low cost economies. They pay the producers for the final goods and send invoices on much higher value to the wholesalers and final users. The difference should cover own R&D costs as well as management. They buy and sell a good classified within the same product category and by that presumably has not been transformed by the transaction. So, the R&D and management units appear from a superficial statistical point of view as a special kind of trading activity under the heading of merchanting separated from wholesale and retail trade (cf. figure 3 below).

49. The research based enterprises becomes so to say a wholesaler in their own products, protected by intellectual property rights. This situation has not been foreseen in the NA guidelines, e.g. ISIC rev. 4. The view of the GMGP is to relocate these units into manufacturing, but regarding what they actually do this might not be the best way forward. Only if the R&D activity performed in the FGP-unit is defined as part of manufacturing activity they should actually be classified within manufacturing. Therefore it is important that the borderline between experimental and non-experimental development is clear. Maybe some of the product specific part currently under R&D should be moved to the same activity where the product is part of output.

50. Now it is time to come back to how we can handle the four cases mentioned in the introduction and which have raised questions regarding the classification of activities.

A. Goods sent abroad for processing

51. In the case of goods sent for processing both generally speaking and specifically in the case sent abroad the doubts regarding what is being produced is created by the mixing up of the output definition with the activity definition of services. The output definition is the one separating goods from services and nowadays also in a restricted sense products under copyright (IPP) (cf. table 1 below). If we stick to the wording, i.e. that it is a processing service (contract service) it is easy to lose track. But, as mentioned above, all productive activities are defined as services performed on something or for someone.
Table 1: The holy trinity of activity, output and payment

<table>
<thead>
<tr>
<th>Productive activity (service)</th>
<th>Output (goods, IPP and services)</th>
<th>Payment (goods vs processing service)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.01.12 Growing of rice</td>
<td>Rice corn, raw (good)</td>
<td>Goods output price</td>
</tr>
<tr>
<td>A.01.41 Raising of cattle and buffaloes</td>
<td>Milk, raw (good)</td>
<td>Goods output price</td>
</tr>
<tr>
<td>B.06.10 Extraction of crude petroleum</td>
<td>Petroleum, raw (good)</td>
<td>Goods output price</td>
</tr>
<tr>
<td>C.10.50 Manufacture of milk and cream</td>
<td>Milk and cream (good)</td>
<td>Goods output or processing service price</td>
</tr>
<tr>
<td>C.10.61 Rice milling</td>
<td>Paraboiled rice (good)</td>
<td>Goods output or processing service price</td>
</tr>
<tr>
<td>C.18.10 Printing and binding of books</td>
<td>Printing and binding services</td>
<td>Processing service price</td>
</tr>
<tr>
<td>C.19.20 Manufacture of refined petroleum products</td>
<td>Gasoline, fuel oil, gases etc. (good)</td>
<td>Goods output or processing service price</td>
</tr>
<tr>
<td>C.26.30 Manufacture of communication equipment</td>
<td>Mobile communication equipment (good)</td>
<td>Goods output or processing service price</td>
</tr>
<tr>
<td>J.58.11 Publishing of books</td>
<td>Book titles (IPP) and books (good)</td>
<td>Goods output price</td>
</tr>
<tr>
<td>M.72.10 Research and experimental development in natural sciences</td>
<td>Patent (IPP) and R&amp;D services</td>
<td>R&amp;D service price</td>
</tr>
<tr>
<td>M.74.10 Graphical and other specialised design</td>
<td>Copyright (IPP) and copyright services</td>
<td>Copyright service price</td>
</tr>
<tr>
<td>R.90.03 Literary and artistic creation</td>
<td>Copyright (IPP) and copyright services</td>
<td>Copyright service price</td>
</tr>
</tbody>
</table>

52. The table above describes the differences when an activity is observed from three different perspectives: what is performed in the black box the establishment (activity), what is the result of the activity (output) and what does the payment superficially refer to. What we want to grasp in the classification work is the productive activity but we are doing this by looking at the output and payments which sometimes can lead us astray. The payment can be for the finished good or only for the processing service, but in both cases an identical good in the physical sense is transferred. In the table we have only noted this double possibility in a number of typical cases where the processing service is an important output on its own (for example milling and oil refinery).

53. What the payment refers to are in some cases, like in the cases of milling, only the processing service when the own harvested crop is brought for processing or when crude petroleum is sent to be processed at an oil refinery. According to ISIC the buying of a processing service is the only option for the printing activity which has become a strange species in the classification when the goods output was moved together with the publishing activity.

54. Above this we also want to group activities according to their output. The grouping is done in the output dimension and starts with goods and should be followed by IPP including copyrights and patents because they in the form of assets have some common characteristics with goods like the possibility of transaction after they have been created (this implies storage and transport possibilities). The grouping should end with service output. But as is obvious from table 1 the grouping by output is not very stringent in this respect. Among the goods output we have printing services (output of activity C.18) and within what could have been part of the division for IPP output for example as output under the publishing activity (J.58) we can find goods like books (moved from C.18). Finally, among the services we have several activities leading up to IPP output like patents (M.72), and copyright protected design (M.74.1) as well as literary and artistic originals (R.90.03).
55. Someone might be objecting to this and argue, in the same way as can be found in the CPC-manual, that the book as output in the publishing industry is not a good in the strict sense. We will discuss this in relation to the publishing activity as understood by ISIC.

56. It is common within the publishing activity that books are printed in foreign countries due to printing costs. This could be as an example of goods sent abroad for processing but since the publisher only sends an original copy of the IPP (immaterial input), no material input is provided to the printing firm for the processing into the finished book. According to this the publisher resembles a FGP and should be classified as a wholesaler in books (merchant). But, by including the book as an IPP output in the publishing industry this treatment is circumvented. The sales of books covers all the costs including the costs of creating the publishing right (copyright). We will come back to the question if it is possible to apply this treatment on all FGPs.

B. The publishing industry according to ISIC rev. 4

57. The publishing industry (J.58) according to ISIC rev. 4 has two principally different products as output. In ISIC they are treated as IPP output but this, I think, is a simplification. First and foremost we have the publishing right to a book title, notes and lyrics or music recording etc. which is a copyright. It is this and similar rights which make up the category of intellectual property products (IPP) in the publishing industry. The publishing right nowadays also covers downloadable copies which, according to ISIC, are included as a separate IPP output of the industry.

58. Here we could have halted, but a third output in the form of goods; books, CDs etc. is also included as output. The reason for the book to be part of the output in the publishing industry is related to its double nature as a physical object, a container of the immaterial content in the form of “information”. As a mass produced good this is the main source of revenue for book publishers and at the same time it is a necessary device by which the story including the graphical design can be acquired by the reader. The book is a device and not an IPP. The story can also be disseminated and acquired in relation to a service for example a public reading of the text by the author or someone else making the story come to live. These activities belong to the performing arts (R.90.01).

59. The main problem with ISIC rev. 4 is that a clear guiding principle is missing for the grouping of activities into goods, IPP and services respectively. The once overarching output dimension has by changes over the years become mixed with ownership (outsourcing) and payments (books, DVDs etc.). But, when we divide the economy into productive activities, especially in a social accounting framework like the NA, the ownership dimension has to be suppressed. Such a division should be done with the result of the activity (output) as guiding principle. Ownership is a state not an activity and can as such not be used as guideline in the activity classification work.

60. The output of the book publisher is the book title (IPP) and certainly not the book which is the good sold to cover the costs. Since the buyer of the book does not have copyright to the book title the book sale cannot be a sale of an IPP. Payments are financial transactions and do not tell very much about the activity the good is an output of and which the payment refers to. The very same good can be paid in full directly to the producer or only as a processing service if inputs are provided by the buyer. The payment might also cover more than meets the eyes as part of covering IPP costs.

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6 Cf. CPC ver. 2.1, p. 11

7 According to ISIC downloadable files and books are regarded as IPP output due to the embedded information content.
61. According to what has been noted above, ISIC has to be revised in order to be coherent and consistent. The goods output under activities J.58 and J.59 should be moved back to the printing and reproducing industry (C.18). These goods are ordered by the publishers to be filled with a copy of the immaterial asset (book title etc.) owned by the publishers and to be sold so all the costs in the business can be recovered with a surplus to be distributed to the owners.

Figure 2: Publishing enterprises as FPGs

62. By redefining the books, CDs etc. as goods the publishing enterprises will become the most obvious example of what in the GMGP is called Factoryless Goods Producers (FGP) (cf. figure 2 below). The role publishing enterprises play in the economy is to create titles to books, films, music etc. and to use these for mass production of consumption goods making it possible to individually acquire the story etc. embedded. But goods production and the sales are mainly transferred to other units specialised in these areas.

63. The text is the material form of the story and not an IPP over which ownership rights has changed between buyer and seller of the book. The buyer of the book is still not allowed to make copies of the text for sale. If we would like to extend IPP to include the information dissemination then we certainly will enter into problems. Ownership rights cannot be established for information. Information can be shared once you have it without penalty at least in open democratic societies. The kind of information which is classified is normally so under a contract the employer has entered into voluntarily.

64. The main output in the activities J.58 and J.59 should as a consequence be the copyright related products (IPPs). These are created for own final use but are used by other enterprises to created goods which brings revenue to the publishing enterprise. Most of the employees are certainly engaged in creating the publishing rights (IPPs) but the largest gross value added is created by the use of the transformation service flow when the IPP is used up as capital services in the activity of producing and selling physical books and e-books. Publishing enterprises are market producers even if large efforts are put in creating assets for their own use. In such cases we therefore have to be observant on the fact that wages and the number of employees will lead us in the wrong direction when used in the classification work.
Instead of a publishing right we can regard a patent for mobile telephone networks. The patent holder to a certain transmission standard can use it to produce network stations. But if the enterprise outsources the production to a contract producer and only sells the equipment to telecom operators to be installed in their network this resembles the activity of a publisher. The creation of an IPP (copyright or patent), no in house goods production but the finished output is sold and the revenue covers all costs including the contract producer and own R&D.

We will now make a parallel to publishing as it is described in ISIC, but with the difference that we accept my proposal that the books, CDs etc. are classified as goods, and still as described in ISIC are regarded as outputs of the publishing industry. This will translate to the situation that the good, a FGP enterprise, makes money on should be classified into the same activity as the FGP as patent holder. But if the mobile phone equipment enterprise together with other enterprise units are classified in the R&D activity the situation will be a little bit absurd. All patented goods would in such a case be part of the output of the R&D activity. This is clearly not an option and we are left with only two other possibilities if we still want to have research based units included in manufacturing; either we accept that the main focus in outsourcing lies on the ownership of the output and not the material inputs or we can change the borderline between R&D in the R&D activity and the product specific R&D activities created in manufacturing.

C. Outsourcing of goods production

When a specific moment in the production is done outside the establishment at another unit this is named goods sent for processing but when the entire or at least the major parts of the goods producing activities are moved we use the term outsourcing. Outsourcing can in principle regard all parts of the production chain including ancillary activities. Normally R&D and management functions are still kept at the enterprise or enterprise group. Outsourcing includes the relocation of activities to other establishments within the enterprise or another part of the enterprise group even if this unit is located in the same economy. It is the establishment that should be classified according to the activity undertaken and the activity outside the establishment should be disregarded. According to the guidelines in ISIC rev. 4 the unit outsourcing the entire production and which does not provide the material input in any form but takes responsibility for the sales of the finished product should be classified as a wholesaler (merchant) (cf. figure 3 below).

This can seem strange when we regard how the ownership and the final result of the production process are handled when it comes to IPPs. That the remainder after outsourcing, which might be a research based enterprise, acts as wholesaler is not a good description of the reality but maybe a practical solution for the merchandise trade statistics. ISIC does not address the question of ownership of the output in relation to copyright or patents which is an obvious weakness. If we want to have these kinds of enterprises classified outside the trade industry, we therefore have to modify the current understanding of ISIC. This can be done by ignoring ownership and consider it from a social accounting perspective which is the same as accepting that the input of capital services (transformation services) should have the same position and be treated in the same way as material input. We can translate this to that ownership of material inputs is a sufficient but not a necessary criterion for being classified in manufacturing.

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8 Cf. ISIC rev. 4 §144-5, s.30. Regarding the formulation in ISIC it seems that what is in focus is actually the ownership of the output. ("...therefore owns the final output."). The unit owing the material input to be processed is assumed to be the owner of output. The same should be valid for the owner of patents and copyright, while no other unit than the owner of the copyright can sell the product without the permission of the copyright owner. In this sense the ownership of the material input is a sufficient but not necessary criterion for the classification of the unit owing input to the same activity as the contract producer. For statistical purposes it therefore should be possible to make corrections in the activity classification.
Another way would be to focus on the ownership of output. In reality the demand for ownership of material input is a practical solution to settle which unit has the ownership of output. No profit making enterprise would provide inputs for free if they don’t get something in return. But as noted above, ownership as a criterion for classifying units is dubious.

Figure 3: The FGP as a merchant (wholesaler)

In the long run it will probably be impossible to exclude the IPP and the services derived from it when we classify activities. Otherwise we will have the current peculiar situation, namely that an establishment (or enterprise) buying the inputs for further processing by a sub-contractor will be classified differently than an establishment which lets the sub-contractor buy the input material (cf. figure 3 above and figure 4 below).

If it is only the ownership of material inputs which is the difference between wholesaler and manufacturer one can wonder if the classification guidelines are logical. This implies that we should at least demand that the input is produced as output from the unit owing it. In reality it is the activity undertaken within the establishment which should settle the classification work. Ownership of material or immaterial inputs will not give a conclusive hint to this. It seems that we have to disregard ownership in order to resolve this seemingly logical contradiction.

In the GMGP it is suggested that immaterial input like copyright should be treated on equal terms as material input in the outsourcing of goods production. If we accept that the book is a good and not an IPP, which I have proposed above, and in that sense should treated as output of the printing industry and if we at the same time accept the proposal in the GMGP the consequences to the publishing industry, will ironically be a relocation to the printing industry in the ISIC where it once belonged.

But if we want to make the IPP producers visible in the classification we should give them an own division. If this is a strong intention and if we also think that books, CDs etc. actually are goods we have to find a different solution than the one proposed in the GMGP. Well, we can of course continue to treat books CDs etc. as IPPs or maybe put them in a fourth category of products.
Figure 4: The FGP as a manufacturer (owner of material input)

![Diagram of FGP as a manufacturer](image)

Note: In the figures ownership rights moves in the opposite direction in relation to payments.

74. By moving the output of product specific R&D, if it is possible, to the activity where the product is the output will lead to a situation where units mainly engaged in creating product specific patents for example in the area of mobile phone technique are classified in the same activity as the producers of mobile phone equipment like network stations. In this way we can escape the problem of treating FGP as merchants and still change the product classification by bringing books, CDs etc. back to goods where they belong.

D. Merchanting of services

75. In the chapter 10 of the GMGP a specific problem under the label of “merchanting of services” is brought to the attention of the reader. Simply stated it seems to exist an intermediary between the producer of a service and the customer. The payment for the service or a software copy is made via the intermediary. The role the intermediary plays in this transaction is on the other hand unclear. But what is not clarified is that it is of importance if the intermediary is an enterprise in the same enterprise group as the producer (subsidiary) for example the parent of the group or if the intermediary is any unrelated enterprise. The cases so far known of have all had the common characteristic that the intermediary and the producer are related and belonging to the same enterprise group. In such cases we should be careful and not as the first option accept that what we observe by looking at the payments is a case of trade in services.

76. According to the narrow definition of services they are consumed at the same moment they are produced with special attention for services leading up to IPPs. In this sense “merchanting of services” is a supernatural phenomenon in the NA world. To supernatural phenomenon we usually search for rational explanations and they also exists in this case. When there is an ownership relation between the producer of the service and the receiver of the payment for the service from the customer it will be natural to suspect that part of the payment goes to the intermediary as compensation for it costs related to the service produced. But it is unlikely that these costs should be a trade margin. If the intermediary is the parent and/or head office it should come as no surprise that customer relations are handled at this level and
furthermore the parent can provide some services to the subsidiary producer of the service like invoicing and IPP capital services.

77. Part of the payment is kept by the parent as compensation for its participation in the business. The question is if the compensation only relates to the costs of the parent or if it also includes some kind of redistribution of profits from the subsidiary? This is a case when the payments can be misleading and make us believe that the payment flows corresponds to real service flows. In any case we have to investigate if the parent is providing a composite service (two or more services in a package) or if the compensation relates to a trade margin. Figure 5: Observed monetary flows and two possible product transactions (service and software)

As stated in the GMGP these two possibilities differ in respect of that the former should be recorded gross whereas the trade margin is a net of the two gross flows to and from the parent. The monetary transaction between the customer and the subsidiary should be recorded direct to the subsidiary without passing the parent.

78. Now we will regard two other cases (cf. figure 5 above). The first case is when the subsidiary is providing a software service in order to modify and improve the functioning of the standard software provided to the customer by the same enterprise group the subsidiary enterprise is part of.

79. The subsidiary has remote access to the customer network and uploads the modified program instructions. Uploading is transportation of the result of the programming service in the form of a computer file which should not be mixed up with the service locally produced by the subsidiary. Installation is made by sending instructions to the remote computers. The work done at the local work place at the site of the subsidiary is not bridging a distance it is the result of the work in the form of files and instructions which bridge the distance by means of the Internet. Since the subsidiary has used the IPP asset of the parent as capital services the parent has to be compensated and these flows. If the payment from the customer goes to the parent which retains a part and then passes the rest to the subsidiary we have to reroute these payments in order to show them as the opposite of the service flows (figure 6 below).
80. We can also imagine that there is an actual transaction of modified computer software, which is something material like a computer file, sent to the customer for installation by the customer self. The work on the software is still made at the establishment of the subsidiary but the installation is made at the customers place(s). In this case the software might pass from the subsidiary (producer) to the parent and finally end up at the customer.

81. The transfer of the file and the payments might therefore correspond to each other (cf. figure 5 above) and the parent is compensated by the subsidiary for the ownership of the IPP. But since there is no transformation of the software by the parent we should in this case as well reroute the distribution of the software and the monetary flows in the same manner as for the previous case (cf. figure 6 above).

82. The question we face is if we by good reasons can exclude one or several of the alternatives we have of representing the non-monetary transactions between the three units. But before we can answer this question we first have to have a clear view of what services are. Unfortunately this seems to be something like an open question. For example: short term leasing (service) and long term leasing (acquisition of an asset) are treated differently more or less out of practical reasons (boundary of capital formation). The discussion in this paper points nevertheless to the conclusion that the uncertainty surrounding the concept “merchanting of services” do not give good reasons to change the current understanding of services which corresponds to the narrow definition.

Summary and conclusions

83. This paper deals primarily with the relations between the three main product output categories; goods, services and intellectual property products. Even though IPPs have become more visible in the classifications the category has by far the same position as goods and services. The understanding of what intellectual property products are and their position in the classifications as well as the treatment in the national accounts would benefit from some intellectual work.
4. The relations between the output categories are illustrated by examples from recent problem areas related to globalisation in the national accounting framework. Goods sent abroad for processing raised the question of what the output of a processing service is. This question can be settled by a clear understanding of the distinction between transformation services and output. The change in the product classification (CPC) by regarding books, CDs etc. as IPP output instead of being goods has challenged the understanding of what IPP is. This change was probably influenced by focusing too much on the payments financing the IPP, i.e. mixing up the output paid by customers to finance the IPP with the IPP output itself.

85. A deeper understanding of what is going on in the publishing industry might give us a clearer view of the contribution of IPP capital services from factoryless goods producers to sub-contractors. The treatment of outsourcing in ISIC has been increasingly problematic since strong trends in globalisation strips down enterprises in high income economies of all their manufacturing. FGPs in many cases now end up being international wholesalers undertaking merchanting activities. For practical reasons the recommendations in ISIC might be relevant but for the purpose of describing the economic relations they are out of date. But, fortunately this problem can be overcome by several measures. Finally, the way global enterprise groups have set up their business model has created monetary flows which give a superficial impression services being traded and transported. The phenomenon goes under the label “merchanting of services” and can be given rational explanations. Now it is up to the national accounts community to decide on the way forward.

86. The strong recommendation of the paper is that books, CDs etc. no longer should be treated as IPP output. Since the copyright is not transferred when these goods are sold they lack the fundamental property of an publishing IPP, the ownership right to make copies for sale. The location of the publishing industry should on the other hand remain separated from activities of goods manufacturing. The change of ISIC, motivated by the IPP output produced by publishers, is in this respect still valid. This change should be followed by moving other IPP producing activities to a common IPP division.

87. The factoryless goods producers treated as wholesalers are a clear paradox in the description of the economic reality. Enterprises inventing and developing products under copyright protected brands should not be treated as simple wholesalers of the products no one else is allowed to produce and sell without permission. But the options we have for relocating FGPs to manufacturing or other relevant activities depend among all on the output classification and whether ownership of inputs and outputs should be regarded as a valid criterion for classifying units by activity. In the end a change in the borderline between R&D and non-experimental development might be the only option for relocating FGPs to manufacturing.
References:


