

STATISTICS DIRECTORATE
COMMITTEE ON STATISTICS

Cancels & replaces the same document of 15 November 2010

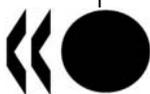
Working Party on National Accounts**INTERNATIONAL TRANSACTIONS IN INTELLECTUAL PROPERTY IN MULTI-NATIONALS**

To be held on 1-3 December 2010
OECD Conference Centre
Beginning at 9:30 a.m. on the first day

This document has been prepared by Nadim Ahmad (OECD) and will be presented under item 1 of the draft agenda.

In recent years there has been an increasing internationalisation of IPP flows, reflecting in part an increase in global production processes but also an increasing tendency for multinationals to relocate IPPs to SPEs created in low-tax jurisdictions. This relocation results in shifts of value-added between economies for what is ostensibly only an administrative change in the organization of the MNE. The question such transfers raise, is who is the economic owner of the IPP? This paper develops ideas formulated during the drafting of the UNECE manual on globalization in the national accounts and asks whether a wider discussion of the issue, under the umbrella of an expert group, is necessary.

For further information please contact:
Nadim Ahmad
E-mail: Nadim.AHMAD@oecd.org

JT03292916

INTERNATIONAL TRANSACTIONS IN INTELLECTUAL PROPERTY IN MULTI-NATIONALS

I. Introduction

1. The 2008 SNA recognizes five categories of intellectual property assets:
 - i. Research and development;
 - ii. Mineral exploration and evaluation;
 - iii. Computer software and databases;
 - iv. Entertainment, literary and artistic originals; and
 - v. Other IPPs.
2. To varying degrees, each of the five categories of IPP can be broken down into the following IPP types:
 - The *original* IPP – whether produced on own-account or sold (customised)
 - *Licences to reproduce* the IPP
 - *Copies* of the original that allow owners to use the copy for more than year.
3. *Services* can also be provided by IPP originals: typically these reflect copies that allow owners to use the copy for one year or less but they can also reflect customised services not related to an underlying original that only have a expected life of one year or less)
4. Both the 2008 SNA and BPM6 treat IPPs, transactions in the IPP assets (originals, licences to reproduce, and copies) as transactions in *produced* assets¹. Because the assets are produced, any international trade in them, or international services provided by them, must be recorded in the goods and services accounts.
5. With the exception of mineral exploration and evaluation, IPPs are subject to substantial international trade. Commonly, the trade relates to copies of IPPs, such as packaged software, and musical and film recordings, or the services provided by them, but trade in originals, such as an R&D original, is becoming increasingly important, partly reflecting the increasing internationalisation of production processes and partly because the 2008 SNA recognised R&D as a produced asset for the first time.
6. Unlike other produced assets however, which physically move across borders when they are bought and sold, IPPs generally don't; reflecting, for want of a better phrase, their largely intangible nature, and the fact that they can moved across borders electronically. This presents obvious measurement challenges for statisticians; meaning that transactions in IPPs may not always appear in trade statistics as

¹ Except for transactions with households or purchases of copies that are embedded and sold on in other products.

trade in goods and services. Often they appear under the general BPM5 category of ‘royalties and other license fees’ without any further breakdown to distinguish whether the royalties etc relate to produced or non-produced assets (although BPM6 changes should improve the situation here). There is a possibility therefore that payments for the use of, or for, IPPs that are included in ‘royalties and other license fees’ may not be separately identifiable with a specific IPP, and instead are misallocated to ‘royalties and other license fees’ related to non-produced assets, such as trademarks or franchise fees.

7. But it also raises more subtle questions. Chief amongst these is the question of economic ownership or, rather, identifying the economic, as opposed to the legal, owner of IPPs.

8. The intangible nature of IPPs means that they can be relatively easily located or registered as the property of a unit in any country even if they are exclusively used in production by an enterprise located in another. This characteristic creates a strong incentive for companies to locate their IPPs as the property of a unit in a low-tax jurisdiction. For example a mobile-phone producer in a high-tax jurisdiction, which develops its own software that is embedded in the phone, might choose to transfer ownership of the software original to a subsidiary, or SPE, it creates in a low-tax jurisdiction; whose sole output is copies of the original to the parent company. This would shift GDP from the parent company to the affiliate despite the fact that the production process of the parent company has, to the casual observer, remained the same.

9. This raises difficult questions for national accountants and users. On the one hand, one can argue that the transfer of the IPP from the parent company to the affiliate reflects an economic reality resulting in shifts of GDP from the parent to the affiliate; in much the same way that GDP would shift if some other productive activity were outsourced from the parent to the affiliate. On the other hand one could argue that the transfer is merely an administrative arrangement and that the economic owner, in the strict sense of the concept (risks and rewards), of the asset remains the parent company. To avoid any possible confusion, it’s important to note that neither approach is necessarily inconsistent with the 2008 SNA. The determining characteristic that differentiates between the two approaches is ownership - in other words, who owns the original? Unfortunately little explicit practical guidance exists in the 2008 SNA on when economic ownership should be assumed to have been transferred or not between affiliated enterprises.

II. The 2008 SNA

10. Before developing the arguments related to economic ownership, it's useful to recap what the SNA says on IPPs.. Indeed, it's important to note that the difficulties related to measurement and indeed the issue of economic ownership are not caused by any underlying conceptual change introduced in the 2008 SNA per se; which, with two exceptions, merely replicates the 1993 SNA. These two exceptions concern the treatment of R&D and the treatment of sales of licenses to reproduce with a duration of more than one year.

11. The 1993 SNA did not recognise R&D as an intellectual property asset. In this sense therefore the changes introduced in the 2008 SNA have merely increased the size, but not the nature, of the difficulties related to the identification and correct classification of transactions that already existed in the 1993 SNA.

12. The second exception concerns the treatment of sales of licenses to reproduce. The 1993 SNA recommended that payments for licenses to reproduce should be recorded as payments for services provided by the ‘original’ IPP. The 2008 SNA however treats the license to reproduce as reflecting a part of the underlying ‘original’. As such when a license is sold it does not directly reflect new production. Indeed, even when a license to reproduce is sold for use in a territory that had not prior been factored into the valuation of the original, the accounts should record a positive increase in other changes in the volume

of assets account (cancelling out the negative GFCF incurred through the sale of the license/part of the original).

13. Paragraphs 10.199 and 10.200 of the 2008 SNA say the following on the treatment of IPPs:

10.99 Some IPPs are used solely by the unit responsible for their development or by a single unit to whom the product is transferred. Mineral exploration and evaluation is an example. Other products, such as computer software and artistic originals, are used in two forms. The first is the original or “master copy”. This is frequently controlled by a single unit but exceptions exist as explained below. The original is used to make copies that are in turn supplied to other units. The copies may be sold outright or made available under a licence.

10.100 A copy sold outright may be treated as a fixed asset if it satisfies the necessary conditions, that is, it will be used in production for a period in excess of one year. A copy made available under a licence to use may also be treated as a fixed asset if it meets the necessary conditions, that is, it is expected to be used in production for more than one year and the licensee assumes all the risks and rewards of ownership. A good, but not necessary, indication is if the licence to use is purchased with a single payment for use over a multi-year period. If the acquisition of a copy with a licence to use is purchased with regular payments over a multi-year contract and the licensee is judged to have acquired economic ownership of the copy, then it should be regarded as the acquisition of an asset. If regular payments are made for a licence to use without a long-term contract, then the payments are treated as payments for a service. If there is a large initial payment followed by a series of smaller payments in succeeding years, the initial payment is recorded as gross fixed capital formation and the succeeding payments as payments for a service. If the licence allows the licensee to reproduce the original and subsequently assume responsibility for the distribution, support and maintenance of these copies, then this is described as a licence to reproduce and should be regarded as the sale of part or whole of the original to the unit holding the licence to reproduce.

14. IPPs can be made available for use in a number of ways therefore. An original can be sold or transferred; copies can be sold (licenses to use for more than year); licenses to use (for one year or less) can be sold; and finally licenses to reproduce can be provided. Elaborating on these cases the following accounting entries arise when companies (affiliated or otherwise) engage in transactions in IPPs:

- i. *When the entire IPP original (produced in a prior accounting period) is sold by one company for sole use by another:* The accounts should record an export and negative GFCF in the exporting country and a corresponding import and positive GFCF in the importing country.
- ii. *When the entire IPP original (produced in the same accounting period) is sold by one company for sole use by another:* The accounts should record an export in the exporting country and a corresponding import and positive GFCF in the importing country.
- iii. *When a licence to reproduce is sold by one company to another:* Assuming that the creation and acquisition of the license to reproduce does not change the value of the underlying original, the accounts should record an export and negative GFCF in the exporting country and a corresponding import and positive GFCF in the importing country.
- iv. *When a copy or licence to use is sold by one company to another:* As long as the copy or license-to-use satisfies the requirements that it can be treated as an asset, the accounts should record an export (equivalent to the value of the copy/license) and a corresponding import and positive GFCF in the importing country.

- v. *When the underlying asset is used to provide services only:* This is equivalent to the provision of a license-to-use or license to reproduce that does not satisfy asset requirements. In these circumstances the accounts should record an export (equivalent to the value of the services) and a corresponding import in the importing country.

15. The rules above hold whether the transactions relate to flows between affiliated enterprises or not. However, it's useful to elaborate a little on the additional flows that should be recorded when IPPs are transferred between affiliates. When an IPP is provided by one affiliated enterprise to another, either in its entirety or via a license to use or reproduce, a number of possibilities for recording the transaction arise:

- a. The most simple case, which follows from the above, occurs when there is either a sale or licence agreement between the provider and the recipient: the provider gives access to the IPP in exchange for a fee that is observable and should be recorded in the BOP and SNA goods and services accounts.

16. However the acquisition of the IPP may not always be as simple as illustrated above.

- b. The IPP may, for example, be provided for free. In theory, imputations should be made to reflect this gift. The first imputation should reflect a capital transfer from the provider to the recipient. A second imputation will then be needed to record the acquisition/sale of the IPP from/by the provider; following the rules (i) to (v) described above, depending on the specific type of IPP.
- c. The IPP is provided by the parent to a foreign subsidiary without a fee but with the expectation of receiving increased property income from the affiliate in the future. In effect, the parent is providing the IPP for a fee and then using the fee to increase its foreign direct investment in the subsidiary. In this case the accounts should record increased FDI from the parent, equivalent to the value of the IPP, and a subsequent purchase/sale of the IPP from/by the parent (again following the flows described in (i) to (v) above, depending on the IPP type). An alternative to an increase in FDI is to impute a loan from the parent equivalent in value to the IPP.
- d. The IPP is provided to the parent by the foreign subsidiary without a fee but in response to previous foreign direct investment. The accounts should impute the acquisition/sale of the IPP and then an additional equivalent increase in property income received by the parent.

17. Transactions between affiliates also impact on the valuation of the original IPP. There are two possibilities for dealing with this:

- i. The aggregate value of the asset has increased within the multinational: in other words the expected present value of future benefits has increased, as could occur, for example, if the multinational acquired a new affiliate and so obtained economic rights within a country that were not expected at the time of the original valuation. This would be recorded in the other changes in the volume of assets account of the provider. Such recordings have been rare in practice. A consequential difficulty is related to the split, if any, of the asset across the different countries where economic rights exist.
- ii. The aggregate value of the asset has not changed: the provider expected to share the asset in some way at the time it was acquired. In other words the original valuation reflected the scope for its use across different countries.

Economic Ownership in Multinationals

18. The growth in activities by multinationals and their creation of global production networks has led to complicated flows related to the use of IPPs, which may have been developed in one country but used widely throughout the multinational, possibly for free, if the IPP is not registered as an economic

asset by the MNE. Indeed in some countries the scale of output related to underlying IPPs used in production by foreign affiliates has been so large that the policy emphasis has shifted to GNI away from GDP; reflecting the fact that the earnings of the affiliates will be returned as property income to their parent companies.

19. Such a shift seems a natural consequence of increased globalization. Companies have powerful incentives to move production processes abroad, such as low labour costs, access to markets, raw materials, regulatory burdens etc but where intellectual property is concerned a powerful incentive is a low-tax environment, particularly if the IPP is transferred to a SPE whose sole purpose is to charge for the use of the IPP. Indeed governments themselves have powerful incentives to encourage such relocations onto their own territories as they are able to tax the profits of companies (SPEs) who otherwise would have located elsewhere..

20. But such transfers of IPPs, in particular transfers to special holding companies in low-tax jurisdictions, whose sole raison d'être is to maximise post-tax profits for multinationals, raises some philosophical questions pertaining to ownership. The ability to shift IPPs has meant that any value-added generated by an IPP can also be shifted anywhere in the world, despite the fact that to all extents and purposes the underlying production process in which the IPP is used and the ultimate beneficiary (parent company) has remained unchanged.

21. That is not to say that this outcome is necessarily at odds with the national accounts but it does complicate economic analysis, and, arguably, dilutes the relevance of GDP, as is already being seen in countries with significant outward flows of property income.

22. Given that, increasingly, transfers of intellectual property are motivated only by a desire to minimize tax liabilities, and only result in, arguably, administrative changes, that sees no change in the turnover of an enterprise, a legitimate question arises about who the economic owner is, as opposed to the legal owner, in a national accounts sense; which raises questions about whether the SNA contains sufficient guidance to determine ownership of IPPs within multinationals.

23. The issue can be summarized by way of the following question. If company A, the producer and sole user of an IPP, transfers ownership of the IPP, for tax purposes, to a specially created shell subsidiary in a low-tax jurisdiction to whom it subsequently pays annual licence fees for use, and receives all of the post-tax income from the subsidiary, does it make sense that gross value-added in A falls and B rises; despite the fact everything else has remained equal?

24. In other words does it make sense that GDP can differ significantly because of, arguably, superficial administrative changes in flows within a multinational designed to minimize taxes. Does the subsidiary, the legal owner of the IPP, also satisfy the requirements that it is also the economic owner?

25. Paragraph 10.5 of the 2008 SNA defines legal and economic ownership. It says:

The legal owner of entities such as goods and services, natural resources, financial assets and liabilities is the institutional unit entitled in law and sustainable under the law to claim the benefits associated with the entities. By contrast, the economic owner of entities such as goods and services, natural resources, financial assets and liabilities is the institutional unit entitled to claim the benefits associated with the use of the entity in question in the course of an economic activity by virtue of accepting the associated risks.

26. The key distinction between the two concepts is who accepts the risks. In most cases the economic owner and legal owner coincide. But not always and where this occurs the accounts make

provision for the recording of transfers in ownership, in an economic sense, by imputing financial leases. Paragraphs 17.304 and 17.308 say the following on financial leases:

17.304. A financial lease is one where the lessor as legal owner of an asset passes the economic ownership to the lessee who then accepts the operating risks and receives the economic benefits from using the asset in a productive activity. In return, the lessor accepts another package of risks and rewards from the lessee. It is frequently the case that the lessor, though the legal owner of the asset, never takes physical delivery of the asset but consents to its delivery directly to the lessee. One indicator of a financial lease is that it is the responsibility of the economic owner to provide any necessary repair and maintenance of the asset. Under a financial lease, the legal owner is shown as issuing a loan to the lessee with which the lessee acquires the asset. Thereafter the asset is shown on the balance sheet of the lessee and not the lessor; the corresponding loan is shown as an asset of the lessor and a liability of the lessee.

17.308 Although a financial lease will typically be for several years, the duration of the lease does not determine whether the lease is to be regarded as an operating or financial lease. In some cases a large complex such as an airport or even a building may be leased for short periods, perhaps only one year at a time, but on condition that the lessee takes all responsibility for the asset, including all maintenance and cover for exceptional damage, for example.

27. If a parent company therefore transfers an IPP to a specially created subsidiary to which it subsequently makes payments in return for using the IPP asset, one can legitimately ask whether the payments should be recorded as financial lease payments for reacquiring the IPP, rather than payments for the use of the IPP. Indeed, as paragraph 17.308 shows, the question holds even if the payments are not subject to a long-standing lease agreement covering more than one year. Certainly a strong case can be made for which of the two enterprises (the parent or the subsidiary) assumes the risks of ownership, especially if the subsidiary is merely a mailbox company: for example if the parent company retained responsibility for providing fixes or improvements to the underlying IPP, such as the software code or R&D.

28. For the specific case where a parent company is the sole user of an IPP, there seems a fairly strong argument therefore to reroute payments that may currently be recorded in the accounts as receipts for IPP services in the accounts of the subsidiary, and instead record them as property income payments, on the grounds that the parent company remains the economic owner of the IPP - which would require that the IPP remains on the balance sheets of the parent company and not the SPE.

29. But not all examples of transactions related to IPPs and multinationals are quite so simple unfortunately; especially in cases when the subsidiary provides services or copies to non-affiliated consumers. Consider for example the case where the parent company transfers its intellectual property to a shell company, whose sole output is the provision of licenses to non-affiliated consumers. For example, the simple case of an author, resident in country A, who decides to sell copies of his/her book from country B. Under these circumstances it is not so clear where the value-added relating to the production of copies should be accrued. Much depends on where the risks were assumed.

30. If for example the author's expenses for marketing the book, where all sales were on-line, were accrued in country A, one could argue that the asset should be recorded on the balance sheets of country A. However if the author also created a production arm in country B, that was responsible for selling and distributing hard-copies of the book, one could argue that the value-added should accrue to country B. Much depends therefore on the nature of the affiliate. For example if the affiliate has negligible operating costs one could conclude the affiliate was an SPE and that the asset resided in country A but if significant

costs, relative to its output, were incurred, the arguments for recording the asset on the balance sheets of the subsidiary (and therefore also the value-added generated by it).

31. Developing a clear set of rules and criteria for differentiating between economic and legal ownership in cases of IPPs is clearly non-trivial and will require a collective effort at the international level. Until that time however there remains the possibility that international comparability will be affected.

32. Some countries for example may consider the income generated from intellectual property registered in their country as property income (on the grounds that the IPP is in fact owned by the parent located abroad) whilst others may take the view that it is legitimate productive income. This will affect comparisons of GDP but not GNI, and indeed impact on analyses of international flows in goods and services.

33. It is important to note that the possibility that one country treats flows as property income and another treats similar flows as productive income does not necessarily make either wrong, so long of course, that the underlying IPP asset is consistently allocated to the implicit owner in either treatment. It is important to ensure that where there are productive income flows, the accounts record on the balance sheets the value of the IPP, and, indeed, at some earlier point the acquisition or production of the IPP. Not ensuring such a consistency will have a detrimental impact on economic analyses such as total factor productivity estimates.

34. Until the underlying question relating to economic ownership is resolved therefore it is possible that some international incomparability will remain. . However, as described above, such differences in treatment can at least be conceptually reconciled with who the economic owners implicitly are. This may require modifications to ensure consistency between estimates of value-added and capital stocks. To be more precise the accounts will need to ensure that the estimates of capital stock in all affiliated enterprises include those IPPs of which they are implicitly the economic owners.

35. In other words, if the accounts show payments for the use of an IPP between affiliates then the economic owner is implicitly the recipient of the payments for use and the balance sheets should reflect this. If on the other hand no explicit flows related to an IPP are recorded then implicitly one can assume that the flows are property income flows not related to an underlying IPP (in other words the affiliated enterprises that use the asset own it or parts of it and, so, have no need to make service payments for its use). Countries will need to determine whether this is treatment is consistent with what they record on the balance sheets of their MNEs.

36. Although far from ideal, as international incomparability will remain, this approach implies little change to the way transactions are currently recorded in the national accounts of countries but will ensure a consistency between the underlying capital and the value-added derived from it.. Ideally, new surveys targeted at covering the entire activities of multinationals should be launched to directly address the measurement of these transactions (and a number of countries including the Netherlands and Ireland have embarked on similar work) but the creation of an expert group to tackle the underlying conceptual issue and provide practical guidance that could be used in developing surveys may also be necessary.