



**DISCUSSION DRAFT ON THE ATTRIBUTION OF PROFITS TO PERMANENT
ESTABLISHMENTS (PES: PART III (ENTERPRISES CARRYING ON GLOBAL TRADING OF
FINANCIAL INSTRUMENTS))**

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PART III: SPECIAL CONSIDERATIONS FOR APPLYING THE WORKING HYPOTHESIS TO PERMANENT ESTABLISHMENTS (PES) OF ENTERPRISES CARRYING ON GLOBAL TRADING OF FINANCIAL INSTRUMENTS

A. Introduction

1. Part I of this Report describes how to apply the working hypothesis (WH) to a permanent establishment for the purposes of testing the application of the WH in general. However, it is also considered necessary to supplement this general advice with more specific and practical guidance in order to assist the testing of the application of the WH in commonly occurring factual situations. Part II of this Report examines the special considerations that need to be taken into account when applying the WH to attribute profit to a PE carrying on a traditional banking business, the borrowing and on lending of money.

2. This Part of the Report (Part III) looks at the global trading of financial instruments (global trading), an activity that is commonly carried out by banks but also by financial institutions other than banks. Particular attention is paid as to how the WH might apply to a number of factual situations commonly found in enterprises carrying on a global trading business through a PE. The starting point for this analysis is naturally the 1998 OECD document: “The Taxation of Global Trading of Financial Instruments” (“Global Trading Report”).

3. However, there have been changes in global financial markets that affect the global trading of financial instruments even in the short period of time since the publication of the Global Trading Report (for example increasing use of credit derivatives). More significantly, since 1998 there have been changes in thinking about the taxation of PEs and especially the application of the arm’s length principle of Article 7 (2). This led to the development of the WH described in Part I of this Report. Further thinking has also been given to the application of the arm’s length principle of Article 9 and the guidance on that principle in the OECD Transfer Pricing Guidelines (“Guidelines”) to a global trading business conducted between associated enterprises. Particular attention has been paid to the application of the profit split method, the assumption of risk and the evaluation of the reward for provision of capital.

4. Part III of the Report is therefore intended to update the issues and situations described in the 1998 Report and to provide guidance on the application of both Articles 7 and 9 to global trading. Part B describes the scope of Part III by providing a definition of global trading and goes on to provide a factual and functional analysis of a global trading business. Part C discusses the application of the Guidelines to a global trading business conducted between associated enterprises. Part D discusses how the WH would apply to a PE of an enterprise carrying on a business of the global trading of financial instruments (“a global trading PE”).

5. This Report only discusses the issues related to transfer pricing in relation to associated enterprises and to the attribution of income and expenses within a single legal entity, which arise when global trading of financial instruments is conducted in more than one jurisdiction. Other issues related to global trading businesses are not considered. For example, the issue of the source of income from derivative contracts and the possible imposition of withholding tax to income from derivative products is not discussed. Further, consistent with Parts I and II, the Report does not consider the question of whether

a PE exists in respect of a particular global trading activity, for example through a dependent agent. Part III also does not discuss transfer pricing or attribution issues in relation to other cross-border activities undertaken by financial institutions such as mergers and acquisitions, capital market advisory services, securitisation of financial assets or financial instruments, underwriting or funds management.

B. Definition, factual and functional analysis of an enterprise carrying on global trading

6. This section starts by defining what is meant by global trading and what types of income arise as a result of global trading activities. It then goes on to describe the factual background of global trading, concentrating on the economic circumstances and business strategies before describing in general the various functions that make up global trading businesses. Such a factual and functional analysis is essential in order that the discussion of the transfer pricing and attribution of profit¹ issues raised by the global trading of financial products later in this Report is soundly based on an accurate analysis of the current factual situation. Indeed, such an analysis is an essential preliminary step in applying the Guidelines to determine transfer pricing between associated enterprises and to attribute profit to a PE in accordance with the WH. Following the approach in Chapter I of the Guidelines, the analysis of functions performed takes into account the assets used and risks assumed in performing those functions.

B-1 Definition of global trading of financial instruments

7. In the financial sector, the term “global trading” has become the catch-all phrase that focuses on the capacity of financial institutions to execute customers’ orders in financial products in markets around the world and/or around the clock. This activity includes underwriting and distributing products on a world-wide basis, acting as a market-maker in physical securities (i.e., the traditional bond and equity markets) and in derivative instruments² acting as a broker for client transactions on stock and commodities exchanges around the world, and developing new products to meet the needs of the financial institution’s clients, for example credit derivatives. The income earned by the financial institution from these activities consists of interest and dividends received with respect to the inventory it is required to maintain in order to be a market-maker with respect to physical securities, trading gains from sales of that inventory, income from notional principal contracts and other over-the-counter (OTC) derivatives entered into with clients, fee income from structuring transactions, gains from dealing in liabilities, income from stocklending and repo transactions, and brokers’ fees from exchange transactions executed for clients.

8. Enterprises that engage in global trading in this sense, i.e. market making, may also seek to make profit by correctly forecasting the movement in market variables (such as interest rates, exchange rates or prices) that affect the value of their portfolio. This involves the deliberate exposure of the portfolio to changes in the market variables and is sometimes referred to as taking a “proprietary position”. Some enterprises manage proprietary positions on a global or 24 hour basis but do not make markets. However, in this Report the term “global trading” refers primarily to those entities that, at a minimum, engage in market making on a global or 24 hour basis.

1. It should be noted that under the WH, the same principles should be applied to attribute losses as to attribute profits. References to attributing “profits” should therefore be taken as applying equally to attributing losses.

2. A derivative instrument is a contractual right that derives its value from the value of something else, such as a debt security, equity, commodity or a specific index. The most common derivative instruments are forwards, futures, options and notional principal contracts such as swaps, caps, floors, collars and credit derivatives. Unlike traditional debt and equity securities, these instruments generally do not involve a return on an initial investment.

9. Although the global trading entity typically has a presence in more than one of the three main time zones, the discussion in this paper focuses on the tax issues that arise whenever financial products are offered to customers in more than one jurisdiction (even within the same time zone). Such activities are at the heart of the global trading tax problem as they require the determination of transfer prices between associated enterprises or, in cases where permanent establishments are involved, the attribution of income and expenses within a single legal entity operating in different jurisdictions. In short, for the purpose of this Report, global trading of financial instruments is defined by reference to the fact that some part of the business takes place in more than one jurisdiction.

B-2 Factual situation

10. This section provides a descriptive background to global trading. It is in three parts. The first part describes the commercial environment in which global trading businesses operate. The second part describes the business strategies that enterprises engaged in global trading may adopt. The third part describes the various organisational structures that businesses conducting global trading may use.

i) Commercial Environment

11. It is difficult to make generalisations about the structure of a global trading business because the manner in which the business is conducted is influenced by a number of factors. These include a) the type of institution conducting the trading, b) the product being traded c) technology available. These factors are discussed in turn below.

a) Institutions

12. Global trading now is conducted by many types of financial institutions, although the commercial and investment banks tend to dominate the marketplace. These entities have the resources to develop or hire the necessary trading expertise and the capital base necessary to engage in global trading. All institutions conducting global trading are subject to regulatory requirements, but these requirements will vary depending, amongst other things, on the type of institution involved. Regulatory authorities are concerned that financial firms under their control adequately evaluate their risk exposure and have sufficient long term capital to cover those risks.

13. The requirement for adequate capital has led to a variety of innovative structures which global trading firms have set up in order to give their clients confidence that they are sufficiently well endowed with capital to be able to assume and manage the risks arising from global trading. In order to participate in the over-the-counter (OTC) derivatives business:

- Some financial institutions that are not sufficiently creditworthy to engage in such transactions directly have established AAA-rated subsidiaries to act as market-makers in derivatives. Such entities may then enter into mirror transactions to transfer the market risk to the location where it can be managed most effectively, while maintaining the credit risk in the subsidiary.
- Other financial institutions have set up special-purpose derivatives subsidiaries, primarily to avoid certain regulatory requirements that would apply to the parent company. In that case, the risk is managed in the subsidiary rather than being passed on to the parent.

b) Products

14. It is now possible to buy almost any financial product, including most currencies, many debt instruments (particularly government securities), and some equities and commodities, at any hour of the night or day. To that extent, it is possible to say that almost all financial products are traded globally. However, the level of global trading in products varies widely, with the deepest world-wide markets found in certain currencies and derivative instruments and the markets for equities perhaps the most localised.

15. A financial institution acts as a dealer in derivative instruments by offering to enter into executory contracts with customers. In “over the counter” (OTC) derivative contracts, the “product” is created when the financial institution enters into the derivative contract with the end-user. The financial institution remains a party to the transaction until the transaction matures or the financial institution assigns its rights and obligations to a third party or enters into an agreement with the counterparty to terminate the transaction.

16. The financial institution may act only as a broker for a customer that wants to enter into exchange-traded derivatives contracts. In that case, the customer enters into the transaction with the exchange or a clearing house and so the financial institution is not a party to the transaction. Accordingly, the financial institution does not have a “position” on its books from which it can earn trading profits. Its income from the transaction consists of the commission paid, usually in advance, by the institution’s customer.

c) Technology Available

17. Technological advances allow managers, traders, marketers and operations personnel to track, price and measure the various types of risk resulting from thousands of trades occurring around the world on a “real time” basis. Financial intermediaries have invested enormous resources in developing systems that allow them to correlate risks and develop hedging strategies so that they can manage the risk they take on from their customers without subjecting the firms to unacceptable absolute levels of exposure to market changes.

ii) Business Strategy

18. Differences in business strategies, even as among those institutions that market and trade derivative instruments, may affect where and how business is conducted (and therefore the analysis of the business for tax purposes).

19. Institutions may have different goals in terms of geographic coverage. Some choose to cover all possible markets and client bases, while others choose to concentrate on their traditional client base in their home country (and perhaps affiliates of those clients located in other countries).

20. Another difference is the extent to which institutions are willing to take on risk. For example, one institution may choose (or be required by regulators) to run its business conservatively, incurring little in the way of unhedged risks, and earning most of its income from the dealer “spread” between the bid and asked prices. Other institutions earn a significant portion of their income from taking unhedged, “proprietary” positions to generate significant trading gains. In general, regulators appear willing to allow securities dealers to incur a higher level of unhedged risks than they are willing to tolerate in the case of banks and insurance companies, which have obligations to retail depositors or policyholders.

21. Institutions also differ in their choices of instruments to market and trade. In some cases, the institution may believe that it will be more competitive if it develops a speciality, such as structuring OTC derivatives transactions to meet the individualised needs of the institution’s customers. This strategy,

which has been followed by some of the best-known derivatives houses, is very labour-intensive and requires a large spread on each transaction in order to be profitable.

22. Other institutions that are market-makers aim to enter into a large number of fairly “plain vanilla” transactions. Although the profit on each transaction is reasonably low, there is also a relatively small level of risk³ and they can count on earning a fairly steady profit from the sheer volume of transactions.

23. Finally, other financial institutions do not view themselves as being primarily “market-makers”, but view their derivatives transactions as a necessary part of their business of being a full-service financial intermediary. Some of the products offered by such full-service financial intermediaries may be loss leaders or in loss making positions, in order to facilitate other business activities. In that case, a financial institution would normally hedge its customers’ positions and any profits would come from the institution’s ability to provide its customers with any of the basic products that a customer can expect.

24. Following financial market liberalisation, a number of financial institutions have developed business strategies based on creating integrated financial services companies. Banks and brokerage companies have merged; insurance and leasing companies are likely to or are in the process of integrating. Further, financial institutions prohibited by regulators from directly carrying on certain types of business have sought ways of indirectly carrying on such business either by buying other financial services businesses or creating special purpose vehicles to carry on that business.

iii) Business Organisation

25. Firms engaged in global trading can use a variety of legal structures and forms to carry out their business. Some trade exclusively through PEs, others through separate legal entities (which may act in their own right or as dependent agents of other entities), whilst others use a combination of PEs and separate legal entities. In addition to a diversity of legal structures, there is an almost limitless number of different business structures that firms engaged in global trading can employ regardless of the legal structure adopted. However, most trading structures can be represented along a continuum, with what has become known as the “Integrated Trading” model at one end, the “Separate Enterprise Trading” model at the other, and the “Centralised Product Management” model in the middle. Typical characteristics of these trading models are described in this section. It should be noted that the models are defined only by reference to the organisation of the trading and risk management activities. The classification of a particular global trading business under one of the above models does not therefore mean that other activities, such as marketing and support, are organised in the same manner as the trading and risk management activities. Indeed, the business dynamic is towards de-centralisation of these functions so as to be geographically close to the customer. This should be borne in mind when conducting the functional analysis.

a) Integrated Trading

26. Integrated Trading has the following characteristics:

- Traders in each trading centre (generally London, New York and Tokyo or Hong Kong) set prices and trade off a portfolio of positions called a “book” while the market is open in that

3. It should be noted that significant risks can also arise in plain vanilla transactions as evidenced by the unexpected announcement in 2001 by the US Treasury that it would cease issuing 30-year bonds

location. The book consists of individual market risks that have been aggregated on the basis that they are sufficiently similar to allow for internal set-offs and correlation, e.g. a Euro floating rate interest book (see paragraph 51 for further description)

- When the markets close in a particular location, responsibility for trading the “book” is passed to the next trading location where the open positions form the starting point for trading. Traders in the new location may close positions passed to them and open new ones. In addition to the “book passing” method described above, trading is increasingly being conducted in a more seamless manner, with traders in one location trading at the same time and from the same book as traders in another location. Where global trading is conducted between associated enterprises the change in trading authority is not accompanied by a change in legal ownership of the book.
- The location of the book does not indicate where the functions necessary to assume risk have taken place. Ordinarily, credit and market risks are initially assumed by the location that enters into the deal with the customer, although the market risks are combined in a portfolio of similar risks and subsequently managed on an ongoing basis by all the trading locations.
- A committee in the institution sets overall trading limits but does not centrally manage the trading operations which are independent. Each location has a head trader who polices the trading limits set by the financial institution.

27. Many institutions trade foreign currency options (as opposed to spot and forward transactions) in this manner.

b) Centralised Product Management

28. Centralised Product Management has the following characteristics:

- All market risk of a particular product is centralised and managed in one location. For example, trading in gilts may be managed by the London branch and trading in US Treasuries managed by the US branch. The decision where to locate the centralised trading location depends on a range of commercial considerations, e.g. market liquidity, ease of hedging, competition, business strategy, location of customers and skilled staff. Consequently, the location of the centralised trading location can change over time as the commercial factors themselves change.
- The financial institution will rely on marketing operations in its other trading centres but will require the marketing location (referred to below as the originating office) to transfer responsibility for managing the market risk to the centralised trading location. This is achieved by either:
 - Booking the transaction directly in the centralised trading location. Under this booking practice, credit risk in addition to market risk will be reported in the centralised trading location, or,
 - Having the marketing location reverse the transaction with a trader in the centralised trading location through an inter-branch (or inter-company) transaction, thus transferring responsibility for managing the market risk to that location. Under this booking practice, credit risk will still be reported in the originating office. However, the marketing location

may still be exposed to market risk for the period between the transaction being entered into and the transaction being reversed out, for example if this is not done until the end of the trading day.

29. The centralised trading location may or may not be where the natural home⁴ or primary market is located.

30. Physical securities appear to be most often traded under a centralised product management approach. However, this structure is also used for other products, including derivatives.

c) Separate Enterprise Trading

31. Separate Enterprise trading has the following characteristics:

- Each trading location, whether in a subsidiary or PE form, operates as if it were a separate profit centre, with its own marketers and traders, and its own books that reflect products sold by that location.
- Different locations may pursue different trading strategies, and in fact may enter into trades with other trading locations. For example, different PEs of a bank may end up with opposite positions as a result of customer transactions and may seek to close such positions by transactions with other parts of the same legal entity.
- Ordinarily, the assumption of credit risk and market risk takes place in the PE as well as the subsequent management of those risks.
- A central committee sets overall trading limits for each location but does not control trading that is within the prescribed limits.

32. Many banks organise their trading in spot and forward transactions of the most heavily traded currencies on a separate enterprise basis.

d) Dynamic and flexible nature of global trading

33. A bank may use a combination of the models described above for different parts of its operations. For instance, its foreign exchange book may be based on a separate enterprise approach while its trading in physical securities may be based on a centralised product management approach.

34. Also, it is important to emphasise that while these trading models are a convenient means of describing how trading activities can be carried out in different ways, the organisation of the trading activities of a given enterprise may not fall neatly within any of the models. For example, trading authority may be neither completely transferred to one particular location nor located in only one jurisdiction. Thus, there could be close co-operation between the head office and the PE in making trading decisions or the primary responsibility for the performance of the book may be located in one jurisdiction, with limited authority to trade the book passed to another jurisdiction. In the latter case, the head of trading may still

4. Some products, such as government securities, may have a primary trading market - sometimes called a "natural home"- where the bulk of trading in that product occurs.

have to be consulted by traders in another location if major decisions have to be taken or trades executed over a pre-set limit - even if it means he or she has to be woken up in the middle of the night.

35. Moreover, the way in which a product is traded may change over time. A financial institution may find that it must grant limited trading authority for the product to traders located outside the original centralised trading location in order to satisfy customer demand during non-business hours in the centralised trading location. In practice, the other trading location may often begin by fulfilling a “nightwatch” function. This is very limited as compared to normal trading and may simply involve monitoring the markets for major events during their trading hours. If such an event occurred, they would not adjust the firm’s position themselves but would be under instructions to wake up the head trader in the centralised location. In some firms the “nightwatch” function may also encompass some trading activities. However, these would usually occur only within very strict pre-set limits or would be restricted to the fulfilment of overnight orders requested by the main trading location. As the amount of trading discretion given to such traders increases, the centralised product management model begins edging toward an integrated trading model.

36. As another example of the way in which global trading activities can change over time, a financial institution may find that the separate enterprise trading model is not the most efficient method for trading a particular product. To reduce costs, it may seek to centralise - or regionalise - some of the trading and risk management operations, moving towards the centralised product management model.

37. In conclusion, although the models described in this section may be a useful analytical tool to assist in the general understanding of global trading, their relevance should not be overstated. In particular, any transfer pricing analysis should proceed as always from the facts and circumstances of the individual taxpayer and should consider the exact functions being performed, assets used and risks assumed, rather than attempt to determine which model the organisation of the trading/risk management functions most closely resembles.

B-3 Functional analysis

38. This section describes in more detail the important functions of global trading businesses starting with the functions performed by the personnel of the firm - “people functions”- and then moving on to consider the assets used and risks assumed in the performance of each of those functions.

i) Functions performed

a) Sales and Marketing Functions

39. In general, the sales and marketing personnel are responsible for all contacts with customers. Usually, such staff are assigned to a particular geographic area and, within that area, may specialise in clients in a particular industry. Such specialisation allows them to learn about industry-wide problems that may be addressed through the use of particular financial instruments. The organisation of the sales and marketing personnel is determined primarily by the need to be accessible to the firm’s clients and so is largely independent of the structure of the trading models described in Section B-2(iii) above. Indeed, in contrast to the trading function, the business dynamic is towards a de-centralisation of the sales and marketing function.

40. Sales and marketing personnel are distinguished from traders as, normally, they are not allowed to price or trade in a product independently. On the other hand, some marketers may have a role in trading with customers and so perform some aspects of the sales/trading functions described in Part II,

although their role is limited because the final responsibility for pricing and accepting the trade rests with the trader. Both sales and marketing personnel have the responsibility of ensuring that the product sold to the client meets the client's needs.

41. There are a number of sales and marketing functions that are common to all types of global trading although different financial institutions address the implementation of these functions in different ways. Generally, the approach adopted by any one institution will reflect the institution's overall business strategy.

42. Some types of global trading may require only a basic sales function which consists of little more than introducing the trade. This may be all that is required for those institutions that treat derivatives as just another of the basic financial products they offer their customers and those institutions may largely rely only on their general sales staff to carry out this function. Such functions do not normally lead to the assumption of significant risk for the location carrying out the basic sales function, except perhaps for operational risk.

43. In many instances, on the other hand, a much more sophisticated function is required that involves structuring a product to meet the needs of the client and negotiating the terms with the client. For example, those institutions whose strategy is to earn a fairly large spread on a few, highly customised derivatives transactions generally maintain a dedicated sales force, the members of which are very familiar with the products. In many cases, these marketers understand the rudiments of pricing and hedging and can work with the traders to develop new products. Product development may also involve significant cross-functional integration (sales/marketers, traders/risk managers, system development, etc.).

44. In this Report, the term "marketers" refers only to the dedicated sales staff (and not to the general sales personnel) and the term "marketing/dealing" refers to the function that includes liaising with traders, negotiating the terms of the deal and involvement in structuring a product to meet the client's requirements. The "marketing/dealing" function includes some elements similar to those typically included in the "sales/trading" function described in Part II, whilst the general sales personnel would normally perform functions similar to the sales/support and sales/marketing functions described in Part II. However, a key difference is that in global trading businesses it is the traders, rather than the marketers that normally undertake functions leading to the assumption of market risk, even though the marketers may assist the traders to do this in some situations.

45. Usually, the marketer is responsible for "running" the deal, including ensuring that the transaction receives all necessary clearances within the financial institution and closing the deal with the customer with the result that this function generally gives rise to the assumption of credit risk. Clearances may be required from the tax, regulatory and compliance departments, as well as from the credit department. New structures may require extensive consultations with the risk management department to ensure that it is possible to hedge the transaction in a cost-effective way.

46. Although the trader determines the price at which he is willing to take a deal onto his book, the marketer is frequently responsible for negotiating the price with the client based on the parameters set by the trader because the trader often does not deal directly with the customer. Accordingly, in the initial stages of negotiating a specific transaction, the marketer obtains an indicative price from the trader or traders who ultimately will price the transaction. As negotiations with the client progress, the marketer will obtain the final price from the trader; the marketer must then execute the transaction at that price or better, thereby creating a "dealer spread" for the financial institution (see paragraph 120).

47. The extent of the mark-up over the trader's "final price" depends in large part on the sophistication of the client. One of the marketer's most significant contributions is determining the price

that a client will be willing to pay. It is reasonably clear that there is not one single market price at the retail level at any particular time. The price prevailing in the wholesale market often (but not always) is more consistent. Accordingly, the role of marketers in the wholesale market is much more limited. Some institutions committed to market-making dedicate one or more marketers to handle the entire wholesale market while other institutions do not use marketers in their wholesale business, but allow the traders to speak directly to the other institution.

b) Trading and Day to Day Risk Management

48. As noted in paragraph 8, global trading involves dealing (that is, making a market) and taking and managing proprietary positions. While marketers are involved in only the dealing aspect of the business, traders are involved in all these activities. Traders both provide marketers with indicative and final prices at which transactions will be entered into with customers and are responsible for the management of the market risk that arises from those transactions once they are entered on the institution's books. Traders and risk managers are not usually responsible for managing credit risk and so unless otherwise stated all references to risk in this section are to market risk. (Section B-3(iii) describes the types of risk typically incurred in a global trading business). Traders are often given the opportunity to earn trading profits by running unhedged positions that may result in substantial gain (or loss), while keeping the ultimate risk incurred by the institution within risk limits that are set by the institution's management. A trader can perform those functions only if the risks incurred by the financial institution are organised into trading portfolios (or "books") of similar risks. For example, a trader responsible for US dollar risks should not have Swedish Kroner liabilities included in his trading book. The Swedish Kroner risks must be allocated to the trader who is responsible for Swedish Kroner risks.

49. This process is fairly straightforward in the case of physical securities. For example, one trader may be responsible for European equities, which may further be broken down into baskets of equities relating to high tech industries, transportation industries, etc. Similarly, in the case of commodities, one trader may be responsible for precious metals and another for oil, or the responsibilities may be further broken down into gold, silver and platinum on the one hand and West Texas crude and North Sea oil on the other. However, in either case, once the books are established, it is fairly easy to assign securities and commodities to the appropriate book.

50. The process is somewhat more complicated in the case of derivative instruments, largely because the cash flows in such instruments are not necessarily limited to a single type of risk. Therefore, in order to manage the risks arising from a transaction, the transaction may be "unbundled" into separate risk components so that they can be assigned to the appropriate trading books.

51. In this process, the risk from a single transaction may be assigned to several different books. For example, a financial institution may purchase a Euro-denominated note paying 5%, the principal amount of which is tied to the performance of the German stock market index, DAX. This note involves fixed-income risk (the risk that Euro interest rates will go up, reducing the value of the note), equity risk (the risk that the value of the DAX will decrease) and, depending on the institution's functional currency, possibly currency risk. These risks must be allocated to the appropriate books, usually by entering into inter-desk transactions negotiated by the traders. Accordingly, a sophisticated derivatives operation may require numerous inter-desk (and inter-branch) transactions simply in order to assign risks to the appropriate trading book.

52. Once the risks are entered into the appropriate books, it is the responsibility of the traders to maximise the financial institution's expected profit on the transaction by managing the risk assumed, subject to the level of market risk that a financial institution is prepared to take. From the time the

transaction has been entered into, throughout the life of the transaction, the trader must decide whether and when to hedge the aggregate market exposure arising from a transaction. Ordinarily, this will be done after netting the risk from the transaction against all the other open risk positions in the book and then hedging some or all of the aggregate market exposure of the book, in accordance with the business strategies of the particular financial institution regarding the exposure to market risk (see paragraph 20).

53. A trader may decide to take a view on prospective market movements by leaving the residual risk in the portfolio unhedged, or may attempt to lock in the existing profits in his book by “hedging down” at the end of the trading day. The residual risk is likely to be hedged either in the over-the-counter market or through purchase of exchange-traded instruments. In any case, however, this process of hedging the residual risk (known as “net” or “portfolio” hedging) generally means that it is difficult to identify particular transactions as “hedges” of other transactions.

54. The trader’s discretion is limited to a greater or lesser degree by the market risk limits that are imposed by all well-run financial institutions. Usually, a financial institution will measure several different aspects of risk in order to establish limits on the amount of market risk to which the institution can be exposed. The amount of risk is measured by reference to the effect on trading revenues of a specified hypothetical “extreme” move in market rates.

55. Most financial institutions with a significant trading presence calculate market risk exposure on at least a daily basis. The calculation of the amount of a financial institution’s market risk exposure is generally verified by an administrative group separate from the trading function as it is an important control on the trading business. This function may also form part of the operational risk management.

56. Depending on the financial institution, there may be a single, institution-wide limit relating to a particular risk. Frequently, the overall limit is subdivided into separate limits that are applicable to particular trading books or to individual traders. The level of risk that a financial institution is willing to incur is one of the most important indications of the institution’s overall business strategy.

57. Although the trading and day to day risk management functions described in this section are usually carried out by the same person, described in this paper as a trader, they can be performed by different people or by different parts of the global trading business. In some countries, a functional separation between trading and risk management is imposed by the regulatory authorities.

c) Treasury

58. The Treasury function is the function that is most similar to the general trading activities of a financial institution and has been discussed for banks in Part II of the Report. The Treasury book traders are responsible for ensuring that the financial institution has sufficient cash to meet its payment obligations but does not have excess cash that is not being used profitably.

59. The task of the Treasury book traders is complicated by the fact that the cash needs of the business fluctuate a great deal. This volatility results in part from the use of exchange-traded contracts and securities to hedge OTC positions. In that case, the cash needs of a particular book (and therefore the business) will depend on whether the exchange-traded or the OTC contracts are in the money. If the book has losses on the exchange-traded contracts and gains on the OTC contracts, its cash needs will be greater than in the opposite case because the institution will be required to meet margin calls with respect to the exchange-traded contracts that it would not be required to make if the losses were with respect to the OTC contracts. Thus, the cash needs of the book are not necessarily related to its overall profitability.

60. Many institutions now view the Treasury function as a separate profit centre and hire traders for the specific purpose of managing the institution's funding costs. In that case, the Treasury desk traders share in the bonus pool on the basis of the "profits" of the book, measured by the difference between the institution's outside funding costs and the "interest" and other "income" or "expense" arising from transactions with other trading books.

61. Inter-desk interest is notionally earned by the Treasury book which functions as a clearinghouse in matching cash needs of certain trading books with the excess cash generated by other trading books. The Treasury book trader is responsible for entering into any foreign exchange transactions necessary to convert a surplus run by one book into a form that can be used to cover a deficit in another book. Net deficits (which may be denominated in any currency in which the institution trades) must be met through external borrowings, while net surpluses generally are placed with banks overnight.

62. Other "income" and "expense" arise from the Treasury desk's internal hedging transactions. Although the institution may borrow in a range of maturities and a number of currencies, the Treasury desk traders generally are more comfortable managing short-term risk in the institution's functional currency. Accordingly, the Treasury desk trader generally will enter into a number of transactions with the other trading books that are intended to convert long-term interest rate or currency risk into short-term risks. For example, if a German bank issues long-term dollar-denominated debt, the Treasury book trader is likely to enter into a currency swap with the bank's dollar book to convert the risk into floating rate Euro-denominated debt. (Floating rate debt presents "short-term" risk because the rate generally is set quarterly at the beginning of the accrual period.)

63. The Treasury desk generally is permitted to enter into hedging transactions with other entities. However, it usually is encouraged by management to enter into transactions with the institution's trading desks in order to maximise net hedging within the institution, thus lowering overall hedging costs.

d) Support

64. The marketers and traders, who generally are identified as "front office", rely on a number of other departments within the financial institution. In some MNEs, there is an Advisory Group that provides advice with respect to business, legal, accounting and tax treatment of products being developed by the marketing team. Although their functions traditionally have been categorised as "back office" functions, many institutions now designate some of the departments, particularly credit, accounting and product control, strategic risk management, research and intangibles development, as "middle office" functions in recognition of their increased importance in the context of global trading. In other institutions the research department may interact very closely with the traders and risk managers and so be very much part of the direct profit-earning process of the "front office".

65. The business dynamic for most support functions is towards centralisation in order to reduce costs, especially where they are capable of being performed without the direct involvement of front office staff. Even in the centralised product management model where the trading and risk management function is centralised, the back office functions may be centralised in a different location to take advantage of lower local costs.

Systems Development

66. Computer systems are also critical to the proper functioning of a global trading operation. The valuation of products, the development of new products, the processing and settlement of trades, the

real-time global risk management of the portfolio, the management of credit and corporate accounting and reporting are all dependent on the availability of sophisticated computer-based systems. In many cases, financial institutions maintain a large staff of computer specialists to develop proprietary systems to link these different functions.

67. In the past, most pricing models were variations of the Black-Scholes option-pricing model or straightforward applications of forward pricing. These basic models frequently were subject to modifications suggested by the traders. Over time, the model itself became proprietary and was viewed as a substantial factor in the institution's success. Presently, the most widely used measure of market risk a financial institution may use is based on "value at risk" ("VAR") models. A VAR-type calculation allows a financial institution to measure the maximum amount it would lose over a particular time period at a certain level of probability. Such internal VAR models are increasingly being endorsed by regulators as an acceptable means of measuring market risk for regulatory purposes.

Credit

68. The credit department's primary responsibility is to analyse new customers and establish appropriate credit limits, monitor the credit exposure throughout the life of a particular transaction and review the total credit exposure compared to the established credit limit with a particular focus on portfolio concentration risk. Many institutions have a centralised credit division that monitors the total credit risk from all of the institution's dealings with a particular counterparty (including lending transactions) and sets a global exposure. Counterparty risk in this context may not simply mean credit exposure to a single legal entity, but may represent credit exposure to various members of an MNE group. In many cases, the global credit risk exposure to an MNE group may be determined on a net basis⁵. A great deal of effort is involved in establishing, reviewing and monitoring the global credit exposure, as various business units around the world enter into transactions and use up the exposure limit. The setting and monitoring of the institution-wide limits may be on a product basis as well as on a customer basis. It involves a thorough analysis of the products offered and the particular client. The work may be conducted at the Head Office level or at the particular PE that services the headquarters of the particular client.

69. Recent evolution has shown an increase in the collateralisation of credit risk exposures, through margining and the use of credit support techniques. The standard swap documentation of the International Swap and Derivatives Association ("ISDA") includes standard credit support annexes which counter-parties can use to minimise their credit risk exposure to each other in respect of transactions executed under the master agreement. In some swap transactions, there is the right of offset, which reduces somewhat the credit risk exposure. The right of offset permits one counter party to offset amounts receivable from another counter party with amounts owed to that counter party such that only net amounts are paid or received. Credit risk exposure is also being minimised on exchange-traded products, through the use of a central clearing house as counter-party. Delivery versus payment ("dvp") settlement is becoming more common for physical securities and currencies.

70. Credit limits imposed by regulators or by the institution's directors may limit the ability of the institution to write new business. In that case, the credit department and marketers may suggest terminating some existing transactions with the counterparty in order to enter into new transactions. As credit limits have become more of a problem, some institutions have decided to dedicate traders to "credit

5. That is, aggregate transactions by MNE group members with enterprises within the MNE financial institution which reduce its credit risk exposure to the MNE group will be deducted from aggregate transactions by MNE group members with enterprises within the MNE financial institution which increase its credit risk exposure to the MNE group. Note that a valid netting agreement needs to be in place if aggregation of transactions is to reduce credit risk exposure.

risk management” to eliminate those transactions with a relatively lower profit (i.e., those with the smallest spread) to allow the institution to enter into other transactions with the counterparty where the profit margin may be higher.

Strategic risk management functions

71. It may also be necessary to consider other “people” functions related to the strategic responsibilities for the allocation of capital and risk within the financial institution (“strategic risk management functions”). Financial institutions do not have an unlimited ability to assume risks. Both the regulatory authorities and the senior management of the firm will be anxious to ensure that the financial institution remains financially sound by having enough capital available to cover the risks it has assumed. The regulatory authority will require that the institution has sufficient regulatory capital available to ensure that any potential losses from the risks assumed would not lead to the bankruptcy of the institution.

72. As part of their duty to the shareholders of the financial institution, senior management will share the goal of the regulators but will also be concerned with maximising the return on the capital raised by the institution. Conventional finance theory suggests that, assuming financial institutions are risk averse, the larger the risk to which an asset is exposed, the larger the expected profit should be. In order to attempt to make more profits, more risks would have to be assumed and more capital would be needed. It should be noted that, theoretically, the assumption of greater risk should increase the *expected* profits. As can be seen from recent experience, the assuming of more risks can lead to the realisation of *actual* losses, rather than the *expected* profits.

73. The goals of the regulator and the shareholders may not exactly coincide but both create a demand for a scarce resource, the capital of the financial institution. The senior management will therefore need to make the most efficient use of the capital of the institution and to meet the requirements of both the regulator and the shareholders. Capital is therefore allocated to particular business areas and within those business areas to particular products and within the particular products to particular locations and so on. The way this is done is usually in the form of “risk limits”. For credit risk, the risk is allocated right down to the level of the individual customer or, if appropriate netting arrangements are in place, to the level of the MNE group and for market risk the allocation is made right down to the level of the individual trader who makes the day-to-day decision to take on risk. This allocation of risk limits, and the associated capital, has a profound effect on the ability to earn trading profits, or indeed to realise trading losses. For example, if location A has a lower overall market risk limit for a particular product than location B, this would restrict the amount of unhedged trading risk location A could assume and so thereby limit the potential for earning trading profits, or indeed realising trading losses, as compared to location B.

Operational Risk Management / Accounting/Product Control

74. Although there is not a uniform approach to operational risk management, primary responsibility for managing operational risk may be assigned to a business line head, or in some instances, product manager. There may also be an important role for internal monitors, such as risk managers, the risk committee, or internal audit, or several different internal monitors who are all important, such as the financial controller, chief information officer and internal auditors. There may be a high-level oversight of operational risk by the board of directors, management committees or audit committees.

75. Accounting is responsible for financial and regulatory accounting and for the specialised accounting required for a trading business. This generally involves preparing daily trading revenue and market risk reports, the preparation of which requires the painstaking process of reconciling the positions shown in computer-generated reports with trade tickets entered during the course of the day’s trading.

76. The existence of reliable product control capabilities was critical to the development of the complex trading and risk management strategies that fostered the explosive growth in global trading, particularly global trading in derivatives. Regulators are increasingly paying attention to the product control function in the light of well-publicised problems at a number of financial institutions over the past few years. In several cases, it appears that substantial losses could have been uncovered at an earlier stage if the product control function had been separated from the trading function. The role of product control may be part of operational risk management.

Other Support Functions

77. The back office performs various other functions, the relative importance of which varies depending on the type of trading business conducted. The operations department is responsible for the confirmation, processing and settlement of trades as well as trader support on the trading floor. The compliance and legal departments are responsible for ensuring compliance with regulatory requirements (which are increasingly complex as the business becomes more global) and for structuring, executing and documenting transactions (which also become increasingly complex as the products become more tailored to the needs of particular clients). In-house economists and researchers may also play an important role in the market analysis for risk management and strategic purposes.

ii) Assets used

78. The Guidelines note at paragraph 1.20 that compensation will usually reflect not just functions performed but also the assets used and risks assumed in performing those functions. So the functional analysis will have to consider what assets are used and what risks are assumed in a global trading business.

79. Section B- 2 of Part II describes the assets used in a traditional banking business and global trading businesses are likely to use assets in the same way. Global trading firms, like banks, also use physical assets such as branch premises, communication systems, computers. The computer hardware constitutes the communication systems used within an MNE financial institution and which with increasing frequency includes access to and utilisation of such communication systems by third party customers (and associated software to facilitate such communication within the MNE financial institution and between it and its customers). It should be noted that there is an increasing trend to outsource the communication systems to independent specialist companies. This may need to be taken into account in making any comparability analysis under the second step of the WH. Of particular importance in this context are the IT and communications systems that a global trader frequently relies upon to carry on and effectively manage its business.

80. Further, as with any other business, the functional analysis should also examine whether any intangible assets have been used. In the global trading area a common intangible is likely to be the marketing intangible represented by the name, reputation, trademark or logo of the global trading firm. Such intangible property will be particularly important for the performance of the marketing function.

81. Other intangibles would be more akin to manufacturing intangibles, such as proprietary (software) systems for pricing financial instruments on prospective third party deals, allocating capital, measuring, monitoring and managing various types of risk. These intangibles result from the efforts of highly skilled personnel and are of particular relevance to the performance of the trading and risk management functions and the “middle office” control functions described at Section B-3(i)(d) above.

iii) *Risks assumed*

82. The essence of global trading is the assumption and ongoing management of risk and this must be taken into account when performing a functional and comparability analysis. This section examines the types of risk assumed in a global trading business and examines the consequences of the assumption of risk for the creditworthiness/capital adequacy of the global trading enterprise. Traditionally, the most commonly identified risk classes were credit risk and market risk. More recently, the importance of operational risk as a separate risk class has become increasingly recognised. Other types of risk are also important in global trading and these are discussed together with operational risks in sub section (c) below.

83. The relative importance of the different types of risk will depend on a number of factors (e.g. nature of the product, business strategy etc) and can also vary over time. For example in traditional banking activities, credit risk is generally the most important risk assumed as a result of the creation of the financial asset because the bank is potentially at risk for the whole of the principal sum advanced to a customer in the form of a loan, even though it may subsequently try to pass on that risk to an independent enterprise, for example through credit derivatives. In global trading of financial instruments, especially derivatives, there is often little or no cash advanced when entering into the derivative contract whereby payments are based on notional principal amounts and the credit risk will initially be only a small fraction of the notional principal amount. However, the amounts payable under a derivative contract depend on market movements and so market risk will be particularly important for global trading businesses (see Section B-3(iii)). This is reflected in the importance of the market risk management functions for global trading businesses. Further, there may be some interaction between each of these classes of risk (for example although market risk may decline for a financial instrument that is “in the money” for the financial institution, the credit risk increases as there is now the risk that the customer will not pay – see paragraph 86 below).

84. Just as for banks, but even more so in a global trading business, the risks assumed from entering into transactions with customers may arise from items which do not appear on the balance sheet. Preparation of a balance sheet is generally done in accordance with accounting standards and to satisfy corporate or other regulatory requirements. The WH by way of contrast is not restricted to an analysis of functions, assets and risks based on accounting standards or satisfaction of corporate or other regulatory requirements. Consequently, the functional analysis would need to identify all risks including those related to material off-balance sheet items that need to be taken into account in the application of the arm’s length principle. Finally, it will be important to distinguish between the initial assumption of risk and the subsequent bearing of that risk. Further any risk assumed and subsequently borne also has to be managed by personnel undertaking the risk management function. The guidance in Part II is equally applicable to global trading.

a) Credit risk

85. As already explained, credit risk is very important in a traditional banking business where the bank advances considerable sums of money to its customers in the form of loans with the expectation that the customers will pay the interest due and repay the principal of the loans in accordance with their terms and conditions. Credit risk is the risk that the bank will not receive the expected payments from the customer. Development of credit derivatives has now permitted banks to manage this risk, often by passing the credit risk arising from their loans to independent global trading enterprises. The credit risk assumed by the independent global trading enterprise must be managed just like other risks assumed as a result of other customer transactions. It should also be kept in mind that the banks may also be assuming risk through credit derivatives, which should be taken into account in the determination of the overall risk exposure and capital adequacy.

86. Credit risk will arise where for example a bond is sold not for cash but on terms which provide for some deferment of payment. For many derivative instruments, credit risk will arise where the instrument has a positive net present value for the global trading enterprise, for example where market movements on an interest rate swap mean that the net present value of the payments to be made by the global trading enterprise over the life of the swap is less than the net present value of the payments it is expected to receive. In the case of derivative transactions, credit exposures will change over the life of the transaction as the market value changes. That is, the credit exposure to a counterparty is often almost zero at the inception of a derivative entered into at current market rates. However, as market rates change, one party is “in the money” and has credit exposure to the counterparty to the extent of the inherent gain in the transaction. If the financial institution is in the money, it runs the risk that it will suffer a credit loss if the counterparty is unable to make the payments required with respect to the transaction.

87. Options generally only involve credit risk for the option buyer, whereby for an option seller there is no credit risk once the buyer has paid the premium. Credit risk also differs for instruments that are traded in organized markets (exchange traded) and those which are traded over-the counter (OTC). In the former, the process of margining provides credit risk management. Where notional principal contracts are utilised, their notional principal amount does not represent the amount at risk, as the loss due to default on a derivative contract is the cost of replacing the contract, less any recovery. Whether a product can be readily liquidated or is typically held until maturity will further impact on credit risk. A change in the credit quality of the obligator may signal a change in the credit risk of a transaction. The measurement of credit risk is important to many financial products, with the impact on pricing of particular significance in this respect. Sovereign risk, which is a category of credit risk, may also impact on the assessment of credit risk. A credit loss will only occur if the counterparty defaults and the derivative contract has a positive mark-to-market value to the non-defaulting party⁶.

88. Credit risk is assumed as a result of the decision to enter into the transaction with the customer. The key point of the functional analysis will be to determine where the decision to enter into the contract is made. Generally this decision is likely to arise from the performance of the marketing/dealing function - this function is equivalent to the sales/trading function for a traditional bank- and not from the general sales/marketing function. In some cases there may be a separate “middle office” function of credit risk management and monitoring. The question is whether such functions lead to the assumption of credit risk. This will depend on the functional analysis. It is not unusual for the group within the financial institution that is responsible for evaluating and managing credit risk and/or making credit decisions in respect of a financial asset to actually bear the counterparty credit risk, pursuant to written internal

⁶ In some situations, derivatives transactions provide a right of offset with respect to amounts owing between counter parties, and this right of offset will reduce the credit risk.

procedures or agreements. Thus, if a counterparty defaults, the loss is not shown in the books of the business division that negotiated, acquired, booked and/or managed the market risk of the financial asset. Rather, the loss is reflected in the books of the division whose credit group evaluated and assumed the credit risk.

b) Market Risk

89. Market risk refers to the exposure to adverse changes in financial prices affecting the value of positions typically held for global trading purposes, for example as a result of fluctuations of foreign exchange rates, interest rates, equity prices or commodity prices. The risk of adverse movements of the mark-to-market value of the trading portfolio is particularly relevant in this respect. As with credit risk, market risk is generally assessed on a portfolio basis, not on individual transactions. In addition to the absolute price risk associated with market movements, several higher order risks such as convexity, volatility (of particular relevance to options and products with option-like characteristics), time decay (also of particular relevance to options), discount risk, and basis risk, as well as yield curve risk are also types of market risk.

90. In terms of the day-to-day management of market risk, decisions have to be made to accept trading positions which would assume market risk. It is particularly important because global trading frequently involves taking a market position and adverse movements in the market have the potential to leave the enterprise with large liabilities and consequently large losses. This is a day-to-day risk in global trading and is incurred both in dealing and in managing proprietary positions.

91. Once that decision has been made, the market risk thereby assumed has to be managed. The management of market risk can result in the reduction of that market risk as far as possible by means of a hedging strategy or can result in an active taking on of market risk positions in the hope of making profits out of market movements. In practice both approaches may be employed to some extent, even to the same trading book.

92. Market risk is also particularly important in relation to certain derivative products. This is because of the nature of some derivative contracts, e.g. options, where the “downside” from adverse market movements can lead to a very large exposure for the global trading enterprise if the position is left unhedged. This contrasts with a traditional bank loan where the “downside” is limited to the outstanding principal and interest payments.

c) Operational and other risks⁷

93. Operational risk has been defined by the Basel Committee as “the risk of direct or indirect loss resulting from inadequate or failed internal processes, people and systems or from external events”. The Basel Committee has also stated that “the most important types of operational risk involve breakdowns in internal controls and corporate governance. Such breakdowns can lead to financial losses through error, fraud or failure to perform in a timely manner or cause the interests of the bank to be compromised in some other way, for example, by its staff exceeding their authority or conducting business in an unethical or risky manner. Other aspects of operational risk include major failure of information technology systems or events such as major fires or disasters.” Operational risks in trading activities may be high. Unlike credit and market risk, operational risk is to a considerable extent internal to the MNE.

⁷ Operational risk is being looked at by the BIS in the context of the proposal to revise the Basel Capital Accord.

94. There are also other types of risk that expose the enterprise to the possibility of very large losses. There is the legal risk that if a particular derivative contract leads to the client making large losses, the client although able to pay may refuse to do so and instead seek compensation for the losses suffered from the global trading firm. There may also be so-called “Herstatt” risk arising from unsettled foreign exchange positions, as well as settlement and delivery risk generally, although real-time gross settlement systems may impact on settlement risk. Solvency risk and general business risk will also be relevant.

95. Further, there are other risks that are not related directly to the financial products. One such risk is a development risk. In particular, companies involved in global trading may devote considerable resources to developing IT and communications systems that are essential in carrying out their business. This involves up-front development expenditure which carries the risk that the systems may not operate as intended or may no longer be needed by the time their development is complete. Similarly, product development carries the risk that the product will not work or will not sell and there is in addition the risk of incurring liabilities if the product is structured incorrectly from a legal point of view.

(iv) *Capital and funding*

a) Introduction

96. The discussion at paragraphs 22-26 of the revised Part II on the role of capital for banks is equally applicable for global trading enterprises. In short, global trading enterprises will also need capital in order to assume the risks arising from their business. Similarly, they will also use a wide variety of financial instruments, including repos and swaps, to fund their trading positions. One special feature of many derivative instruments is that they create potential funding obligations for the financial institution over the life of the instrument, e.g. the need to make periodic payments under an interest rate swap. Such instruments also create an ongoing need for capital to cover the ongoing risks.

b) Creditworthiness

97. The creditworthiness of a global trading enterprise is a crucial factor as a minimum credit rating may be required by some counterparties as a condition to do business with the global trading enterprise and also in the ability to make a profit on its activities. Like banks, global trading enterprises have to fund their operations and their creditworthiness affects the rate at which they can borrow. This has an obvious effect on the profitability of transactions where the global trading enterprise has to borrow, for example to fund the payments it is obliged to make under an interest rate swap contract. Moreover, as discussed in Section C-2(iv), the price of an interest rate swap may vary according to the credit risk inherent in the transaction. Moreover, certain products (particularly long dated or exotic instruments) can effectively only be sold by the most creditworthy financial institutions - AAA rated entities may be able to sell a much wider range of products than lower rated institutions.

c) Capital adequacy requirements

98. Paragraphs 30-35 of Part II describe the relevance of capital adequacy for banks. Similar considerations apply for global trading enterprises, although the exact effect will depend on the level or type of regulation. In short, the level and type of risk that is incurred by an enterprise carrying on a global trading business will determine the amount of capital or alternative means of enhancing perceived credit worthiness that it must have available to assume that risk. The role of traders in managing market risk has similarly already been described in Section B-3(i)(b) but this risk cannot be assumed in the first place

without a sufficient capital base. The significance of capital is illustrated by the fact that talented teams of traders are not normally able to leave a financial institution to set up in business on their own without having access to capital, either by joining forces with another well capitalised institution or by arranging for guarantees from such an institution.

d) Other regulatory requirements

99. It will also be necessary to bear in mind when conducting any transfer pricing analysis the regulatory impact on global trading businesses. In particular, unlike banking, global trading can be carried out by entities that are not regulated directly. The regulatory environment can affect both where a transaction is booked and the cost of entering into the transaction in a particular location. Indeed, this can often produce an initial discrepancy between the economic activity carried out by a particular global trading entity and the activity recorded in its financial statements. Transactions which were created at least in part by the economic activity of one entity may nevertheless be booked in another entity such as a special purpose vehicle, thereby creating the need for arm's length adjustments to be made between the booking entity and the entity which participated in the economic activity.

e) Significance of "free" capital

100. Paragraphs 39-41 of (revised) Part II discuss the significance of "free" capital for banks. The same principles apply for global trading business.

C. The application of the arm's length principle to global trading conducted between associated enterprises

101. Part C deals with the application of the arm's length principle to global trading in general and is divided into three main parts. The first part is a general discussion of the application of the guidance given by the Guidelines, including a discussion of transfer pricing methods. The second part seeks to identify the main transactions between associated enterprises related to the various global trading functions each enterprise performs and then considers the most appropriate way of applying the arm's length principle to those transactions so as to appropriately take into account the performance of the related function. The third part looks in greater detail at the application of profit methods to integrated global trading businesses. Specific issues regarding the application of the arm's length principle when global trading is operated through a PE are discussed in Section D.

C - 1. General application and methods

(i) Applying the arm's length principle

102. The Guidelines make clear in Chapter I that "Application of the arm's length principle is generally based on a comparison of the conditions in a controlled transaction with the conditions in transactions between independent enterprises".⁸

103. The functional analysis described in Section B seeks to identify the different contributions made by the different functions of a global trading business, such as trading and marketing. In the global

⁸ Guidelines 1.15.

trading context, the carrying out of a careful functional analysis will be particularly important because of the wide range of significant functions potentially involved, the variety of risks that can be assumed or transferred, the global dispersal of the performance of many functions and the wide variation in business structures and organisation. Once the functional analysis is complete, it is then necessary to identify the transactions between the associated enterprises and, using the methods described below, determine an arm's length price for those transactions.

(ii) *Transfer pricing methods*

104. In many global trading transactions between associated enterprises (controlled transactions) there may be little difficulty in using traditional transaction methods and in finding comparable transactions so that an arm's length price or gross margin can be determined. This is because, where a business is organised on pure centralised product management model lines, the key entrepreneurial risk-taking functions apart from marketing (ie trading and risk management functions) may all be centralised in one location. The profit attributable to those functions is largely produced from transactions with independents. Most controlled transactions will be in respect of simpler functions performed by associated enterprises, such as support and sales. In many cases these transactions can be characterised as the provision of a service to the enterprise undertaking the key entrepreneurial risk-taking functions. In such cases, comparable market data may be readily available. Similarly, where a business is organised on pure separate enterprise trading model lines, with no integration of functions or locations, it is may be reasonably straightforward to find comparables for the controlled transactions, which, again may be appropriately characterised as service provision.

105. Transactions between independents may still be comparable even though there are some differences from the controlled transaction, provided that "reasonably accurate adjustments can be made to eliminate the material effects of such differences"⁹. For example, a transaction may be found which is similar except that in the controlled transaction there may be no assumption of credit risk. The price of the uncontrolled transaction may still be able to be used if it is possible to make reasonably accurate adjustments to reflect the differences in the assumption of credit risk, perhaps by using third party data for the pricing of credit derivatives.

106. The Guidelines are intended to be applied flexibly and so the search for comparable data may not be restricted to the derivative market. Thus third party data on pricing credit risk from, say, the bond markets could be used provided it meets the "reasonably accurate adjustment" standard of 2.7. However, often the only data from independents is likely to relate to routine or non-discretionary activities, and so it may be difficult to make reasonably accurate adjustments between the controlled and uncontrolled conditions to take account of the considerable differences in functions performed, economic circumstances and business strategies etc.

107. There will be other cases where there may be real difficulty in reliably applying traditional transaction methods. This is particularly likely to be the case when evaluating the trading/risk management function in the fully integrated trading model. In such a case, the key entrepreneurial risk-taking function will itself be split between different entities. Comparable data may be difficult to find as such a trading structure is unlikely to be found amongst independent parties without some kind of formal arrangement to govern the integrated activities. The arrangement can be made in a variety of legal forms, e.g. a joint venture, a partnership or an incorporated body. However, under such arrangements, the independent parties may well not attempt to divide the profits from each transaction but instead may well attempt to determine the overall profits for each party. For example, where the legal form is that of an incorporated body or a

⁹. Guidelines 2.7, 2.16 and 2.34

partnership, the arrangement may divide the rewards from the venture at the shareholder or partnership level respectively.

108. Additionally, a feature of some types of global trading is that there may be a high level of integration and co-operation between and within different functions and locations leading to the situation described in the Guidelines: “Where transactions are very interrelated it might be that they cannot be evaluated on a separate basis. Under similar circumstances, independent enterprises might decide to set up a form of partnership and agree to a form of profit split.”¹⁰. A question arises as to how to evaluate the level of integration of functions in respect of a particular transaction or transactions. The behaviour of the parties may help in this analysis. For example, if the traders in each location are remunerated out of different bonus pools and their performance evaluated by reference to completely different criteria in each location, it should be possible to similarly evaluate the trading transactions in which they are involved, without reference to the other trading locations. Conversely, if the performance of a trader is judged to a significant extent by reference to how well he or she co-operates with traders in the other location, this may be good evidence that, in reality, the trading function is highly integrated across the locations of the co-operating traders.

109. The question of integration should be dealt with on a function-by-function basis. The fully integrated trading model is defined only by the level of integration of the trading and risk management functions - there is no reason why the integration of these functions means it should not be possible to evaluate separately the other functions, such as support, under a traditional transaction method.

110. In some cases it may be possible to deal with integration by making reasonably accurate adjustments to the remuneration for performing the integrated function. For example, the analysis could identify a comparable commission for performing a basic sales function which could then be increased to reflect the additional functions performed and risks assumed (e.g. credit risk) by the marketer who is more integrated into the global business (see paragraphs 105-106). However, where it is not possible to adequately deal with integration in this way, profit methods may be the most reliable way of approximating arm’s length conditions. Although the broad basis for using the transactional profit split methods as described in Chapter III of the Guidelines is clear, there can be problems applying them in practice. The Report discusses these issues further in Section C- 3.

111. Finally, care should also be taken to ensure that the business strategy of the taxpayer is taken into account and that the functions are looked at on a case-by-case basis. For example, the importance of the trading function is likely to be greater if the business aims to make a market for particular products, as opposed to simply supplying them as part of a strategy of providing a “full service” to its customers (see Part B-2 (ii)). This is because in the latter case, the business is likely to adopt a low risk strategy by immediately and fully hedging the customer transaction. This strategy limits the possibility of trading losses but also reduces the potential for making trading profits. In contrast, the market maker is likely to attempt to make trading profits by more active risk management, for example by deliberately leaving customer positions unhedged and thereby hoping to gain from favourable market movements. Such a strategy can lead to large profits but also the possibility of large losses.

C - 2 *Analysis of global trading transactions*

112. This section looks at the types of transactions that commonly occur between associated enterprises engaged in global trading. The analysis of transactions must identify and have regard to the performance of the function that gives rise to the particular transaction. This section discusses the best

¹⁰ Guidelines 3.5

way of applying the arm's length principle to transactions to ensure that the role of the related function is appropriately taken into account.

(i) *Sales and Marketing*

113. The functional analysis may show that an enterprise provides sales and marketing services to an associated enterprise. In transactions between unrelated parties, the amount and type of the reward would depend on the level of services provided, which may be particularly related to the type of product, the functions performed and the risks assumed. For the sales and marketing functions a key question is whether the performance of the function leads to the assumption of credit risk and whether the performance of the marketing/ dealing function leads to some assumption of market risk (see discussion in Section B-3(i)(a)). For example, some general sales personnel merely act as brokers in respect of standardised products and so do not assume any credit risk from the sales transaction. They are likely to be rewarded by a simple fee or commission, e.g. a number of basis points, which does not depend on the profitability of the particular deal.

114. At the other end of the spectrum, some marketers are so highly specialised and closely involved in the process of developing and structuring products that they perform functions leading to the assumption of credit risk and carry out some aspects of the trading function leading to the assumption of market risk. They are likely to insist on a share of the trading profits and losses (although, in the former case, the parties might still call this a commission). In the middle of this spectrum are those marketers who, as a functional analysis shows, act as more than simple brokers and so assume credit risk but who are not as involved in structuring products and so are unlikely to be treated as assuming significant market risk (although as noted in paragraph 28 there may be assumption of market risk for the period before a transaction is reversed out to the centralised product management location).

115. When dealing with the controlled situation, it is necessary first of all to evaluate the exact functions performed (taking into account assets used and risks assumed) by the personnel involved. If the controlled transaction is in respect of general sales functions, market data is likely to be available so that a CUP method, usually in the form of a commission, can easily be applied. However, the situation becomes more difficult if more complex sales and marketing functions are performed. Often the only data available between independents will relate to the basic sales functions which raises the issue as to whether reasonably accurate adjustments can be made to account for the extra functions performed and risks assumed.

116. Another possibility may be to evaluate the sales function by using a resale price method to arrive at an arm's length gross profit margin. A careful comparison of the risks assumed and borne in both the controlled and uncontrolled transaction will be necessary, based on an analysis of the contractual arrangements. A component of the value added by marketing personnel may in certain circumstances be measured by reference to the difference between the price at which a trader would undertake a transaction with a customer and the price actually obtained by the marketer. However, even where there is this relationship, care must be taken to ensure that the rewards attributable to the trader and marketer correctly reflect the functions performed by each, especially taking into account the risks assumed.

117. Flexibility may be needed in order to make reasonably accurate adjustments for any differences between the controlled and uncontrolled transactions under any of the above approaches, perhaps by looking for independent data concerning reasonably comparable marketing functions leading to the assumption of reasonably comparable risks outside the global trading field. It is likely to be easier to find comparables where the function does not give rise to the assumption of significant risk. For example,

the search for comparable data for the marketing of a derivative product need not be restricted to the derivative markets.

118. One possibility would be to increase the amount of commission to reflect the increased functions performed and/or risks assumed as compared to commissions found between independent enterprises. Another possibility might be to add some share of the profit of the transaction to the basic commission payment. In other situations it may be appropriate to reward the marketing function by including it in the profit split calculation. It is not unknown in the financial sector for trading firms to motivate independent marketers by allowing them to retain a portion of the profit on the deals they bring to the trader. This is likely to be more common in businesses where the strategy is to encourage the sale of more complex high margin transactions rather than one where the strategy is to pursue simpler and lower margin transactions with the volume of transactions being the key to profitability. The business strategy should therefore be considered when evaluating the appropriateness of rewarding the marketer in a controlled transaction by a profit share.

119. If it is decided in a particular case that a basic commission payment plus some share of the profit is appropriate, the question arises as to how the share of the profit should be determined. Problems arise particularly with derivative products where the profits can be divided into an initial dealer spread resulting from entering into the transaction and then subsequent trading profits or losses resulting from the ongoing management of the position.

120. Often these profits will be limited to the initial profits (dealer spread) on the customer transaction rather than the subsequent trading profit. This is because if the sales personnel are not involved in structuring the financial products the functions performed would not give rise to the assumption of market risk. Therefore, there would be little justification for them to receive a share in any trading profits, but equally they should be protected from the risk of sharing in any trading losses arising from the realisation of market risks. (N.B. If the dealer spread on a transaction is initially negative then the circumstance surrounding the transaction may need to be examined. For example, if the transaction was entered into even though it was expected that the dealer spread would be negative, it is evidence that the deal had been made for a purpose other than the normal marketing function, e.g. a hedging transaction made at the request of the risk manager in order to hedge another outstanding position. In such a case, the sales function would expect to be rewarded for the broking function being performed and would not expect to bear any of the loss arising from the negative dealer spread. In other cases the marketers should expect to share in the loss they have created as a result of performing a full marketing function.)

121. This approach to compensating a marketer by reference to a share of the initial dealer spread and not a share of the aggregate of the initial dealer spread and subsequent trading profits or losses may not always be appropriate if the functions performed by the marketer are comparable to those performed by the highly specialised marketer described above. Even when working with independent parties, such marketers might expect, by virtue of their close co-operation with the trader in structuring the overall deal, to either gain from, or be penalised by, the subsequent activities of the traders/risk managers in managing the position.

122. Where such highly specialised marketers are employed it may be that the taxpayer has chosen a profit method as the only way of accurately reflecting the contribution of the marketer to the earning of profit, and of dealing with the difficulty of evaluating that function separately from the trading function. A full comparability analysis should help show whether such a profit method is in conformity with the arm's length principle. This will be easier to assess where comparable data from independent parties is available and should be tested by reference to the behaviour of the parties to check that it is consistent with their assigned roles. For example, the highly specialised marketer would only expect to share in the aggregate of the initial dealer spread and subsequent trading profits or losses if they were heavily involved in all

material aspects of structuring the deal. This level of integration and co-operation with the traders may be evidenced by the bonus structure for rewarding such personnel and in their working relationships and procedures.

(ii) *Trading and risk management*

123. As already noted in Section B-3(i)(b), a functional analysis of a business engaged in global trading is likely to determine that trading and risk management is one of the core profit-making activities of the business. The trading activity is normally undertaken with third parties and it is this activity where combined with the marketing/dealing function that directly gives rise to gross profit through “dealer spreads”. Moreover, the trading and risk management function also gives rise to subsequent trading profits or losses from managing the market risks assumed and the consequent requirement for capital. As noted in Section B-3(i)(d) there are a number of levels at which trading decisions can be made. The key function here is the day-to-day decision-making that directly gives rise to the assumption of market risk. The monitoring and strategic risk management functions are discussed in sub-section (iii) below and generally do not give rise to the assumption of market risk.

124. As a starting point it may be helpful to examine the three basic trading models of global trading: integrated trading, centralised product management, and separate enterprise. Unless otherwise stated, risk management refers only to the management of market risk.

125. Traditional transaction methods are normally the most appropriate methods where trading is organised on a separate enterprise model, where each location acts as if it were a separate legal entity in respect of all trading activities. In such cases, each enterprise will individually undertake the core activities and transactions with associated enterprises are likely to involve service provision or financial transactions (such as the hedging). For transactions involving routine service provision, there may be no need to consider methods other than traditional transaction methods in order to reach an appropriate profit for each location associated with the provision of such routine services because of the availability of comparable transactions with unrelated parties. Testing whether hedging transactions are undertaken under arm’s length conditions is more problematic. At one level, consideration will need to be given to the nature and extent of any comparability adjustments. For example, comparability adjustments for differences in credit risk may frequently be necessary, as will adjustments for timing issues amongst other factors.

126. Further, the transfer pricing analysis would have to examine the situation where, as a result of a hedging strategy, losses can be recognised for tax purposes in a jurisdiction other than that in which the gain from an offsetting position is recognised (generally referred to as “split hedges”). This raises difficult issues where the split hedges occur between associated enterprises and will be the subject of future work. Problems also arise where financial institutions use “net” hedging strategies so that it is impossible to trace the gain or loss from any particular transaction to the offsetting gain or loss on the customer transaction it hedges.

127. As noted in paragraph 31, under the separate enterprise trading model, one trading location may enter into trades with another trading location. At another level, a question might arise in some situations involving financial transactions (particularly hedging transactions) between trading locations within the same entity as to whether an independent trader would have entered into such a transaction. If the expected dealer spread on an internal transaction between trading locations is negative or if the NPV on a financial transaction from the perspective of the trading location under examination is negative, then the circumstances surrounding the transaction would need to be examined. It will be important to consider the business strategies of each trading location and of the entity as a whole. For example, it may be that the transaction was entered into for a purpose other than the normal trading function of the particular location

eg an internal hedging transaction made at the request of a central committee managing overall risk limits within the entity. In such cases, it may be necessary to eliminate the effect on trading profits of such transactions and to reward the function performed by the trading location by other means.

128. In theory, there should be fewer problems in evaluating the trading or risk management function for the pure centralised product management model, because the centralised trading location takes the full responsibility for trading and hedging. In such a case the functional analysis in many cases is likely to show that the key trading and risk management functions are undertaken by this centralised product managing location. Therefore it receives the profits attributable to those activities largely as a result of trading and hedging transactions with independent parties and most of the controlled transactions with other locations are in connection with the provision of services other than trading, such as sales and support functions.

129. However, problems can arise when, over time, more complex trading activities are carried out away from the central location, so that the organisational trading structure moves away from the pure centralised product management model and more towards the integrated trading model. This raises the issue of how to reward aspects of the trading function taking place outside the central location. A similar need also arises if risk management is centralised in a different location from the trading location. There is a problem in deciding whether a location which starts to undertake some kind of limited trading or risk management activity under the control of the central location, can still be appropriately rewarded by traditional transaction methods, such as a service fee, as opposed to receiving a share of the overall profits. The answer would depend on a full functional and factual analysis based on the facts and circumstances, especially with regard to whether the location takes the trading decisions that lead to the assumption and management of market risk. For example, if the other location performs purely a “nightwatch” function (see paragraph 35), the lack of risk-taking makes it unlikely the nightwatch location would receive a share of the trading profits when performed between independent enterprises.

130. In the integrated trading model, as in the separate enterprise model, each location has the capacity to perform the full range of trading and risk management functions necessary to conduct the business and thus performs an entrepreneurial role. The difference is that in the integrated trading model, the trading and risk management functions with respect to a particular third party transaction may be split between locations (that is, the entrepreneurial role itself is split) and the gross profit arising from that transaction may be recognised in any or all of the locations. Trading or risk management in integrated form is unlikely to be found between independents and so it may not be possible to make “reasonably accurate adjustments” to make the data comparable. Additionally, in the integrated trading model each location cannot act independently but must co-operate with the others in order to successfully enter into a transaction and subsequently manage the resulting risk. Therefore, it may not be possible that traditional transaction methods could be applied reliably and so consideration should be given to transactional profit methods.

131. In reality, the actual trading or risk management operations may be a hybrid that does not fall completely within one of the three models but may include aspects of the others. Moreover, the manner in which global trading is conducted may change over time as the business evolves. For example, a product may start being traded on a fully integrated basis outside of its original “natural home”, as trading authority is delegated, or the “natural home” may change in the long run. In short, the answer must depend on the factual and functional analysis, with special regard to where the day-to-day decisions to accept market risk are undertaken, rather than on the label given to the trading/risk management organisation in terms of the three models described in Section B-2(iii).

(iii) *Support, middle or back office*

132. Following the Guidelines, the first step when evaluating the support, middle office or back office functions described in Part B, is to see if traditional transaction methods can be reliably applied. In some cases it may be difficult to find a CUP for all such functions because these activities have typically taken place within the same enterprise. However, many support functions, such as settlement, are provided in a similar manner for independent parties and so CUPs may be readily available perhaps even without the need to make reasonably accurate adjustments for any material differences in order to ensure comparability. In other cases reasonably accurate adjustments may be needed to reflect differences in the functions performed or risks assumed. Market data may be available to support such adjustments, even though sometimes the comparables may have to be found outside the global trading context (e.g. investment funds). Also, trends to disaggregate and, in particular to outsource some support or back office functions may increase the availability of comparable uncontrolled transactions.

133. Back office activities include various types of activities, some of which constitute significant parts of global trading, and some of which are quite remote from its main activity. Since activities of key back office staff such as product control staff (sometimes called “middle office” staff) play significant roles in determining the profitability of the whole operation, for example by trying to minimise operational risks, it may be necessary to give further consideration to those activities. CUPs may not be available as a reliable benchmark to evaluate the contribution made by such staff but one possible measure of the contribution of such activities is the amount of compensation to key staff, especially to the extent that their compensation is performance related. The cost plus method may be particularly applicable to such situations.

134. Part B also described the role of support staff in systems and intangible development. In the non-financial sector both the CUP and cost plus methods have often been used to measure the role of such staff, although profit methods have had to be used in some cases, especially where the development of highly valuable and unique intangibles is involved. In the global trading situation, the role of the support staff may often be similar to the contract researchers found in other industry sectors and it may be possible to use a cost plus methodology. In other cases any intangibles will have been developed by the “front office staff” and so have already been taken into account when evaluating their contribution.

135. Given the wide range of functions carried out under the heading of “back office”, “middle office” or “support” it is probably best to deal with the question of the role of such activities on a case-by-case basis. However, given the nature of most support functions, it will usually be possible to use a traditional transaction method to arrive reliably at an arm’s length price for the support functions described in Part B. Independent parties are also unlikely to include routine functions in such a profit-sharing partnership because the volatile nature of global trading profits makes it very difficult to devise a profit share that would give the low but steady economic return which is appropriate for the performance of such functions. The most likely circumstances are where the particular function is so integrated with the other functions that traditional methods could not be applied reliably.

136. In some cases it may be that independent enterprises would have entered into a cost contribution arrangement of the type discussed in Chapter VIII of the Guidelines. Here, also on a case-by-case basis, it would be important to ensure that “each participant’s proportionate share of the overall contributions to the arrangements will be consistent with the participant’s proportionate share of the overall expected benefits to be received under the arrangement, bearing in mind that transfer pricing is not an exact science.”¹¹

¹¹. Guidelines 8.3

(iv) *Role of Capital*

137. In many cases there may be no need to measure any arrangements involving capital as all the capital of the MNE group which underpins the assumption, bearing and management of risk is centralised in the one enterprise where the risk management and trading actually takes place. It is this enterprise that conducts the key entrepreneurial risk-taking functions. The other enterprises of the MNE group which perform other functions, e.g. sales, will still require some capital to support their activities but this is likely to be insignificant compared with the capital necessary to undertake the dealing, trading and risk management functions. However, in other situations, where the key entrepreneurial risk-taking functions are split between different enterprises, or where the capital of the MNE group is centralised in a different legal enterprise from the enterprise that carries out the “people” functions of trading and risk management, it will be necessary to evaluate any arrangements related to capital in order to arrive at an arm’s length reward. The special situation involving the role of capital and risk assumption where global trading takes place through permanent establishments is discussed in Part D.

138. There are two situations where the influence of capital needs to be considered in a global trading business. The first is when undertaking the comparability analysis necessary to apply any transfer pricing method. When undertaking such an analysis it will be important to check that the controlled and uncontrolled transactions being compared are similar with respect to the capital situation, or if there are material differences, that reasonably accurate adjustments can be made for any material differences. The capital situation may be relevant in this case because it may have an effect on the creditworthiness of the entity which, in turn, has an effect on the terms in place with third parties. For example, the price of an interest swap may vary according to the credit risk inherent in the transaction.

139. A possible approach to making adjustments for differences in capital or risk assumption between the controlled and uncontrolled conditions could be based on the capital “used” or “put at risk” in the transaction. Financial businesses need capital to be able to cover the risks they assume and there is a cost to maintaining this capital base. The more risky a transaction the more capital has to be set aside to cover it and the price charged for entering into the transactions should be greater to take account of the increased capital cost. Often such data may be available from independents or the taxpayer may bring forward its own contemporaneous data on the basis that it has been created for business and management purposes and has been validated by the regulatory authorities, although such data requires careful analysis and evaluation.

140. As always when conducting a comparability analysis, it is necessary to consider, in addition to the functions performed, a variety of other factors that may affect the transaction, such as the economic circumstances of the particular market, the business strategy of the taxpayer, the risk profile, and the type and nature of the product. In markets that are not de-regulated, the capital position of the financial institution may not be so important because there is an explicit or implicit government guarantee of the institution and so there is less incentive for customers to pay a premium in order to deal with a highly rated institution. Also the influence of capital is likely to be more important for products that are complex and innovative rather than of a “plain vanilla” type and where the duration of the contract is long rather than short.

141. The second situation is where it is necessary to separately evaluate the role of capital, i.e. where arrangements exist between the associated enterprises whereby the capital necessary to support the risks resides in a different legal enterprise from the enterprise which performs the functions giving rise to the risks actually assumed as a result of the global trading activity. This may take one of two forms: the capital possessor may provide a guarantee or other arrangement by which it provides credit support with respect to transactions entered into by another entity; or it may actually enter into the transactions itself. It

should be noted that in neither case does the enterprise possessing the capital contribute actual debt or equity capital to the associated enterprise carrying on the functions giving rise to the risk.

142. In the first case, the arrangement allows the other enterprise to enter into global trading transactions with counterparties in its own name. The enterprise possessing the capital assumes risks in accordance with the terms and conditions of the arrangement. Of course for this arrangement to have any substance the enterprise possessing the capital must have sufficient capital to be able to bear any losses resulting from the risks assumed under the arrangement with the other enterprise carrying on the trading activity. Otherwise, the transaction may be disregarded under the guidance of paragraph 1.37 of the Guidelines. Furthermore, there are circumstances in which the arrangement would not be recognised because it was not made under the normal commercial conditions that would apply between independent enterprises (see paragraph 1.38 of the Guidelines which discusses the circumstances in which transactions between associated enterprises would be restructured in accordance with economic and commercial reality).

143. In the second case, the entity possessing the capital directly assumes some or all of the risks arising from the global trading activities but it does not carry out the functions giving rise to such risks. As described in paragraph 13, there are various business reasons for such a structure and various forms that it can take. In some cases a question may also arise as to whether the enterprise possessing the capital has a dependent agent PE in the jurisdiction in which the associated enterprise is located. Some guidance is provided in Section D-3 in respect of cases in which a dependent agent PE is found to exist.

144. In either of these cases, it needs to be determined how such arrangements should be rewarded in accordance with the arm's length principle. The question must be answered by a full factual and functional analysis of the risks under the arrangements and the functions performed (and value added) by all the associated enterprises.

145. For example, in the first case, the entity possessing the capital may guarantee a single transaction entered into by the other enterprise. In those circumstances, it may be possible to determine the arm's length compensation by reference to a CUP, since financial markets are familiar with the concept of the assumption of risk and so, for many transactions, data may be available to make adjustments for the influence of capital, in the form of fees charged for assuming particular types of risk, for guaranteeing financial transactions or for enhancing creditworthiness. At the other end of the spectrum, the entity possessing the capital may guarantee all global trading transactions entered into by the other entity, subjecting itself to significant and fluctuating risk. In those circumstances, the enterprise possessing the capital may insist on receiving a share of the net profits arising from counter-party transactions.

146. Similarly, in the second case, where a low risk asset is booked (e.g. a low risk bond), an arm's length arrangement might be that the trader would be rewarded on a commission basis (for which a suitable CUP should be available) and the enterprise possessing the capital would receive the balance of the return on the asset. Where the position booked is high risk, a profit split might be a more appropriate method to reward both the trader and the entity possessing capital.

147. In short, in both cases there are numerous paradigms along the spectrum and the range of acceptable pricing methodologies available will vary according to the facts of each case. Where the entity possessing the capital has assumed relatively little risk, traditional transactional methods may be more suitable while some form of transactional profit split method might be appropriate in cases where the entity possessing the capital has assumed higher levels of risk.

148. Issues also arise as to exactly how to reward the enterprise possessing capital under the profit split methodology. Third party data may well be available to help decide on how the profits could be split.

For example, where the capital resides in a different legal enterprise from the enterprise employing the traders and risk managers, data may be available showing the division of profits in joint ventures between independent traders and enterprises possessing capital. However such data would have to meet the comparability standard of Chapter I of the Guidelines. For example, data is unlikely to be comparable unless it relates to current market conditions, or there is sufficient information about the risk assumptions or business strategies that gave rise to the allocation of profits between the joint venturers etc.

C - 3 *Transactional profit methods*

(i) Types of transactional profit methods to be used

149. Chapter III of the Guidelines describes the transactional profit methods that might be used to approximate arm's length conditions when traditional transaction methods cannot be applied reliably. These are divided into two types of methods.

- The first type is the transactional profit split. This involves splitting the net or gross profits derived from a transaction (or combined transactions) between entities according to the relative contribution of the enterprises involved. The profit to be split may be the entire net or gross profit earned by the enterprises involved (contribution analysis) or the residual profit after the enterprises involved have each been allocated a basic functional reward (residual analysis).
- The second type of transactional profit method is the transactional net margin method (TNMM).

Only profit methods of the type authorised by Chapter III of the Guidelines are to be applied and so any method based on global formulary apportionment must be rejected.

150. Issues arise as to how to calculate the "combined profit" when the various jurisdictions involved compute taxable profit on a different basis (realisation, accruals, mark to market). In general, combined profit is likely to be computed under mark to market rules as these are used both for business and for regulatory purposes, even if the profit shares computed under mark to market rules may be adjusted in some jurisdictions in accordance with their rules on computing taxable profits. Even where all jurisdictions use mark to market, there can still be differences in the computation of profits to be split due to differences in the way the various jurisdictions involved apply mark to market. Similar issues arise whenever profit split methods are used and so are not discussed further in this Report.

151. Issues also arise as to what revenues should be included in the profits to be split. A common problem is in deciding whether the revenues of a treasury book should be taken into account in the global profit split. These revenues could include interest or other income from investing surplus cash or capital and gains or losses from hedging transactions. The resolution of these issues affects the aggregate amount of profits from global trading which is to be allocated among the different jurisdictions. If the decision is taken to exclude the treasury book from the scope of the profit split, it is essential that the transactions with the global trading book are undertaken under arm's length conditions. This is a transfer pricing issue if the treasury book is in a different legal enterprise to the global trading book and it should normally be possible to apply traditional transaction methods because comparable market data should be available.

152. Issues also arise as to whether the profit split should be applied to either gross or net (operating) profits. Guidance can be found at paragraph 3.17 of the Guidelines, which states that,

“[G]enerally, the profit to be combined and divided under the contribution analysis is operating profit. Applying the profit split in this manner ensures that both income and expenses of the MNE are attributed to the relevant associated enterprise on a consistent basis. However, occasionally, it may be appropriate to carry out a split of gross profits and then deduct the expenses incurred in or attributable to each relevant enterprise (and excluding expenses taken into account in computing gross profits).

153. Given that both gross and net profit split methods are expressly permitted by the Guidelines, it is more important in a particular case to ensure that whichever approach is used gives a result within the arm’s length range, rather than attempting to determine that one approach should have priority over the other as a general rule.

154. The residual profit split method may be particularly applicable to some global trading situations because of the wide range of functions that are performed. These range from extremely routine data processing functions to extremely complex marketing, trading and risk management functions performed by highly skilled and paid personnel which risk the capital of the enterprise concerned. Under this method, first of all the more routine or non-integrated functions can be rewarded by traditional transaction methods based on comparable data, leaving the more complex functions for which it may be very difficult to find comparables, to share in the residual profit or loss.

155. For example, the basic trading function could be rewarded in the first stage by reference to market data on non-discretionary or routine activities leaving the discretionary or complex elements to be rewarded by a share in the residual profit or loss. The approach also has the potential to produce a result in accordance with economic theory as the routine functions may receive a lower but more certain economic return, whilst the more complex functions will receive a potentially higher but much more volatile return, with a real risk of making a loss, as well as the possibility of making large profits, in any one year. The residual profit or loss can then be split by reference to an appropriate profit split methodology based on the relative contributions of the parties. In a residual profit split, however, routine functions are not equated with low economic returns. Such functions are those for which market benchmarks are more readily available for determining compensation. For example, the reward for the possession of capital that supports the risks deriving from global trading transactions may be accurately remunerated by reference to market benchmarks and thus may be classified as “routine” even though the market benchmarks may yield a high economic return.

156. However, in some global trading situations, the residual profit split method may not adequately capture the integration of functions found in global trading operations and so underestimate the value of functions that do not share in the residual profit or loss. In such cases, the contribution profit split method may be more reliable because it ensures that all the functions that contribute to the earning of the profits from global trading (i.e. the aggregate of the initial profits (dealer spread) and any subsequent trading profits (or losses) are included in the profit split and avoids having to make an evaluation of which functions in an integrated global trading business are routine and which are not.

157. The sheer diversity of the organisation, business strategies, products and functions of global trading businesses has meant that to date taxpayers and tax authorities have been reluctant in global trading cases to use the other acceptable profit method described in Chapter III of the Guidelines, the transactional net margin method (TNMM). In the core trading function particularly, such diversity makes it very difficult to be sure that the net margins of the uncontrolled transactions are indeed comparable to those found in the controlled transactions. There may be greater scope for using the TNMM when considering middle and back office support functions though there remain problems in that area. In respect of support functions, it might be possible to use TNMM in conjunction with other methods. For example, if it is decided to reward a support function by a traditional cost plus method based on the gross margin of the transaction, in some circumstances it may be useful to also compare the net margin on the transaction, especially where it is not

entirely clear exactly what functions are covered by, or what costs are deducted in arriving at, the gross margin found in the independent transactions.

(ii) *Application of profit split methods to global trading*

158. To apply a profit split method to global trading first of all requires an identification of the functions that need to be rewarded by a profit method following the guidance in Section C-2. It should be noted that when the residual profit method is applied it is only the functions producing the residual profit or loss that need to be included in the profit allocation. The reward for performing the other functions will have already been deducted in calculating the residual profit or loss.

159. Once the relevant functions have been identified, it will be necessary to determine the relative contribution of each function to the earning of the combined profit from global trading. The final step is to determine the relative contribution of each location to the performance of the function. As with all transfer pricing, the above determination of the reward for particular functions should consider the assets used and risks assumed in the performance of those functions. A common approach to applying the profit split method (a multi-factor formula) is to select factors to represent one or more of the relevant functions, to weight the factors to determine the relative contribution of the function(s) represented by each factor and to use the factors to allocate the profit to the locations performing those functions.

160. The rest of this sub-section provides further guidance on how to apply the profit split method in accordance with the arm's length principle, with particular reference to the multi-factor formula approach.

(a) *Identification of the functions to be rewarded by a profit share*

161. Section C-2 identified the various functions of global trading and discussed how those functions could be rewarded, including by the use of profit split methods. Any of the functions listed in that Section could be included in the profit split method. However, given that the trading and risk management functions are the key entrepreneurial risk-taking global trading functions, whenever a profit split method is applied, the performance of the trading and risk management functions will need to be rewarded by a share of the combined profit that those functions have helped to create.

162. Similarly, there are likely to be global trading cases where the marketing function is one of the key entrepreneurial risk taking functions and may be rewarded by a share of the profits from global trading. Under a residual profit method, it is only likely to be those marketers who are involved in the structuring or dealing aspects that need to be rewarded by a share of the profits from global trading. Other marketing function(s) are likely to have already been adequately rewarded by means of a service fee, or commission (perhaps including a share of the dealer spread) that reduces the residual profit available to be shared.

163. As discussed in Section C-2(iii) it is normally possible to reward the performance of most support, middle office or back office functions by means of traditional transaction methods. In the cases where support functions are to be rewarded by means of a share of profits from global trading, it is only likely to be the activities of some key support staff who play significant roles in determining the profitability of the whole operation, for example by managing and minimising operational risk, that are to be included in the profit split. This may be either because it is not possible to reliably adjust for the extra functions they perform or because they are so integrated with the trading or risk management functions that they cannot be evaluated on a separate basis.

164. As discussed in Section C-2 (iv), there may also be a need to reward the enterprise possessing the capital necessary to be able to support the risks assumed from the performance of “people” functions, sometimes through a share of the profits from global trading. As discussed in paragraphs 145-148, this would only be included in the profit split if it was not possible to apply reliably traditional transaction methods to reward that enterprise.

165. Having identified the functions that need to be rewarded with an allocation of profit, the next step where a multi-factor formula approach is used is to select the factors to represent the functions to be included in the profit split. Historically, a “front office” factor has been used in global trading profit splits to represent the performance of the marketing, trading and risk management functions. These functions are lumped together in a single factor because the factor is usually measured by the compensation of the marketers and traders/risk managers. This is discussed in more detail below.

166. However, this approach should be viewed with caution and may not be appropriate in all cases. Regard must be had to the precise functions performed by the various personnel groups and to the different types of risks which each assumes. Marketers, for example, will sometimes have primary responsibility for judging the status of a counterparty and deciding to assume the credit risk whereas traders will be primarily concerned with the market risk and decisions on whether or not to take a proprietary position. The institutions’ higher-level risk managers will have regard to both types of risks. In some cases it may therefore be more appropriate to select a separate factor representing each of the functions to be rewarded in the profit split. For example, there might be separate factors for marketing, trading, risk management.

167. It is also the case that some locations may trade “riskier” products than others and when that is the case the use of a “risk factor” may be required. The importance of this factor and the weighting assigned to it would depend on the nature of the trading activities and the risk assumed as a result. Business indicators such as measures of initial values of particular transactions and representative figures from internal risk management models of risk limits and value at risk assigned to particular trading locations may be taken into account. One purpose of including a risk factor in the profit split is to account for the variation in business (and thus the use of capital) that may exist between locations where this variation is not adequately reflected in the remuneration factor.

(b) Measuring the relative contribution of functions - weighting of the factors

168. It is very unlikely that each function contributes equally to the whole profit. Therefore, where a multi-factor formula is used it is generally appropriate to weight the factors according to the relative contributions of the functions they represent to the overall profitability of the global trading operations. It may not be necessary to weight the factors where compensation is used to measure more than one factor and the relative differences in the contributions of the factors is reflected in the relative differences in the compensation. The weights given to the factors should be determined on a case-by-case basis to ensure that the profit split method results in an arm’s length profit allocation, which distinguishes it from global formula apportionment. Whatever type of profit split method is employed (whether based on a residual or on a contribution analysis) it is essential that functions are fully evaluated in order to arrive at an arm’s length result. This is discussed in detail in Chapter III of the Guidelines.

169. The determination of the relative contribution of each function (or weighting of the factors where a multi-factor formula is used) should be carried out objectively, for example by reference to an economic analysis of the key functions contributing to the earning of the profits from that particular transaction. The determination should also be based as far as possible on empirical data and external benchmarks of how independent parties would allocate profits, taking care to adjust for differences in

economic circumstances, characteristics of the product, and business strategies etc., as described in Chapter I of the Guidelines. The internal data of the taxpayer may be a useful starting point in making this determination, especially where the taxpayer has tried to measure for management purposes the relative contributions of particular functions to the earning of profit. For example, where compensation is used to measure both the trading and marketing functions, the compensation of the traders could be multiplied by 1.5 where it could be demonstrated that trader compensation results in the earning of 1.5 times the profit earned from marketers' compensation

(c) Determining the relative contribution of each location - measurement of factors

170. Where the function(s) are performed in more than one location, it will be necessary to determine the relative contribution of each location to the performance of the function. Under a multi-factor formula it will be necessary to determine the relative contribution of the various locations under each factor. For "people" functions, the compensation of the personnel performing those functions in each location could be used as a factor that reflects the relative contribution of that location to the earning of the global trading profit. This is on the basis that there is a good correlation between the earning of profit for the firm and the earning of compensation for the individuals. The correlation arises because the performance of key global trading personnel, especially traders, risk managers and specialised marketers is crucial to the profitability of global trading. They require adequate compensation for their performance and, if not rewarded adequately, often move to an enterprise which does so reward them.

171. In the rather specialised field of global trading, the compensation negotiated with wholly independent enterprises would also seek to measure the relative contribution of key global trading personnel to the realised profits. Therefore, their compensation is generally correlated with the arm's length value of the functions that they perform and so can be used as a factor to measure the relative contribution of each location to the performance of the particular function. For example, if the total compensation of "front office" personnel in location A is 20% more than "front office" compensation in location B, then location A should be allocated 20% more of the profit arising from the performance of the front office function. However, to keep this correlation, care should be taken to exclude any part of the compensation package which is unrelated to performance.

172. Problems may arise where a single front office factor is used to represent a number of different global trading functions and the factor is measured by the compensation of the people performing those functions. For such a factor to adequately reflect the contributions to profit, it is essential that there is the same relative correlation between compensation and the earning of profits for each function. In other words, each dollar of compensation should result in the same relative amount of dollar profit. Where the correlation differs significantly between functions, it would not be appropriate to use a single "front office" factor without some kind of weighting to reflect the differences between the functions making up the factor.

173. Moreover, if the relationship between compensation and the relative performance of "people" functions breaks down for any reason, then an alternative way of measuring such functions needs to be considered. For instance, the relative contribution of different locations to the marketing function could perhaps be determined by measuring relative volumes, such as the number of transactions or notional amounts of contracts written at a particular location. Differences in exchange rates and in the nature of the underlying products (e.g vanilla products may require less skill, time, and effort than structured products and so may be higher volume but lower value than structured products) may need to be taken into consideration. The same caveats would apply as for the inclusion of any other factor. The inclusion of a separate volume factor, for example, could lead to double counting of the marketing function if the compensation of some marketers is included in another factor.

174. There are two other issues that need to be addressed when using compensation as a factor to allocate the reward for performing one or more “people” functions between different locations. The first issue is how to deal with the situation where a global trading activity that is the subject of a profit split method results in a trading loss in any year.

175. The second issue relates to possible geographical differences in the level of average compensation. There seems to be a general agreement that there are significant differences in compensation levels between countries and that, in theory, adjustments may be needed to exclude any variations not directly related to performance but caused entirely by local factors such as cost of living, local employment conditions and local business practices.

176. There are a number of possible ways to tackle this problem. The first is to ignore the geographical effect on the grounds that there is no completely satisfactory evidence that the cost of living is not reasonably comparable in the major global trading centres and that it is difficult in practice to make accurate adjustments. The second is to focus only on the part of compensation that reflects the value of the traders’ (or marketers’) performance, e.g. the bonus element and ignore basic salary and guaranteed compensation etc. This appears to be administratively simple, but in fact may be difficult to apply in practice because performance-related payments could be made in other forms (e.g. tangible goods) or from other sources (e.g. under a dual contract) and the bonus element of the total salary package may vary, not because of performance, but for other reasons such as cultural differences and employee expectations. The third way is to apply available indices to correct for purely geographical differences. However, care should be taken to apply indices that reflect circumstances specific to global trading and not simply the relative performances of the national economies. Moreover, only those portions of the compensation that reflect differences in the cost of living should be adjusted and such a solution would only deal with the problem of cost of living and not differences in local costs of employment and business practices.

177. In the view of some countries, however, it does not appear appropriate to make a cost of living adjustment to the factors because the justification for using traders’ compensation as an allocation factor is the assumption, based on empirical evidence, that it correlates with profit. Such an adjustment would undermine that assumption, and could lead to proposals for further adjustments such as the differences in business tradition regarding the manner in which traders are rewarded. The proponents of this view argue that traders in some countries are compensated more highly than traders in others regardless of the cost of living. Furthermore, any such adjustments would increase the administrative burdens on taxpayers and the taxing authorities.

178. It is not possible to provide a general rule to deal with all the issues raised above. Following the arm’s length principle, a case-by-case approach is necessary and data on how independent parties would have dealt with these issues should be sought and used if available. Some data may be available from the “joint venture” arrangements already referred to in this paper, provided regard is had to the caveats about comparability discussed in paragraph 148. Some light may also be shed on the subject by examining the internal data of the company, for example with respect to whether management, “middle office” or marketing staff share in the same bonus pool as traders.

Comments from the business community are particularly invited on how loss situations would be dealt with in cases where a transactional profit split method is applied.

(d) Assets used and risks assumed

179. As noted in Section C-2(iv), the enterprise or enterprises possessing the capital necessary to be able to support the risks assumed from the performance of the “people” functions may in some

circumstances be compensated using the profit split method. This raises the issue of how to determine the arm's length reward, especially where there is more than one entity so that there is a need to measure the relative contribution of the different entities. This would be determined on a case-by-case basis. However, unlike, the "people" functions described above, it may not be possible to use a factor based on compensation and so it may be necessary to find other ways of measuring the relative contribution. Possibilities might include internal management data such as capital allocation models or measures of capital "put at risk", Value at Risk(VAR), etc.

180. Finally, just as in the situation where traditional transaction methods are applied, it will also be necessary when weighting or measuring factors to consider whether "risks assumed" or "assets used" have been appropriately taken into account when measuring the contribution of the functions included in the profit split. To illustrate, suppose that the relative contribution of each location to the trading and market risk management functions is determined by the use of a single measure, the "front office" factor, based on the compensation of the marketers, traders and market risk managers. Following the guidance in the Guidelines, it will be necessary when undertaking a functional analysis of the trading and market risk management function in each location to analyse what intangibles were used and what risks were assumed in that location.

181. Suppose that differences are found between the various locations, perhaps because the trading and market risk management function is organised not on fully integrated trading lines but more as a hybrid between the integrated trading and centralised product management models. The traders in location X are found to use an intangible ("trader know-how") which was developed by them. Further, they are found to have higher risk limits, and have accordingly assumed more market risk. The profit split methodology must ensure that the differences in the "assets used" and "risks assumed" in location X are reflected appropriately in the reward given to the performance of the trading and risk management function in location X.

182. There are a number of possible ways of doing this. For example, it might be that the traders and market risk managers in location X are paid more than those in other locations to reflect their "know-how" and greater ability to assume market risk. In that case, using their compensation as the measurement of the "front office" factor should ensure that location X gets a greater share of the profits, or indeed the losses. However, if for some reason these differences are not appropriately reflected in the compensation of the traders and market risk managers in location X, these differences would have to be taken into account in some other way. Perhaps the traders in location X should have their compensation multiplied by an appropriate amount so as to give it more weight in the calculation? Perhaps, as well as the "front office factor", there would have to be appropriately weighted "intangible" and "risk assumption" factors, provided that by doing so would not result in a double counting of these functions. Again, this determination would have to be made on a case-by-case basis.

D. Applying the WH to global trading enterprises operating through a PE.

183. This Section discusses how to apply the WH to a PE of a global trading enterprise. The Section is divided into three parts. Section D-1 describes how to apply the first step of the WH to determine the activities and conditions of the hypothesised distinct and separate global trading enterprise. Section D-2 describes how to apply the second step of the WH to determine the profits of the hypothesised distinct and separate global trading enterprise. Section D-3 discusses some special issues arising where global trading is conducted through agency PEs.

D-1 First step: determining the activities and conditions of the hypothesised distinct and separate enterprise

184. It is necessary under the first step of the WH to hypothesise the PE as a distinct and separate enterprise “engaged in the same or similar activities under the same or similar conditions.” As explained in Part I of this Report (see Section C-1) this will be determined by a thorough functional and factual analysis to identify the economically significant activities and responsibilities undertaken by the enterprise as a whole, before going on to identify which of those economically significant activities and responsibilities are undertaken by the PE, and to what extent. In the global trading context, the function of market risk management is likely to be of particular importance. The accounts or books of the PE will be a useful starting point in this analysis but will not be determinative. For example, as with banks, while taxpayers may book financial assets or instruments in a particular jurisdiction, the results of such booking practices should not be respected where they are inconsistent with the functional and factual analysis. Section B provides a definition of global trading and a brief general functional and factual analysis of global trading activities. This should assist in carrying out the functional and factual analysis of a global trading enterprise.

185. Having identified the functions performed and other relevant factors of the enterprise in relation to global trading operations, the next step under the WH is to determine which of those functions are performed by the PE and what assets are used and what risks are assumed as a result of performing those functions. As for a bank, capital adequacy (especially “free” capital) and creditworthiness are likely to be particularly important for global trading enterprises as both affect the profitability of the enterprise, for example by affecting the margins that can be earned on derivative instruments (the amount independent parties may effectively pay for a derivative instrument may depend in part on the credit rating of the enterprise providing the instrument). This section discusses areas where it is considered further guidance is needed on how to apply the general guidance in Part I of this Report to a global trading PE.

(i) Attributing functions, assets and risks to the PE

186. Looking at the description of the functions necessary to create a new financial instrument, or to subsequently manage that instrument, at Section B-3(i) above, it can be seen that all of the functions are performed by personnel: “people functions”. The functional analysis should therefore be able to determine which of those functions are performed by the PE by looking at whether the people performing those functions are located in the PE. However, it may also be necessary to determine whether some functions although performed outside the PE, should nevertheless be taken into account when attributing profit to the PE as being related to, at least in part, the functions and characteristics of the PE. This will be determined by applying the general guidance on services in Part I of this Report, for example by determining an arm’s length remuneration for “middle-office” monitoring functions performed by Head Office that represent the rendering of a service to the PE.

187. In addition to the input from the relevant personnel, the performance of such “people functions” also requires capital in order to initially assume and subsequently bear the risks associated with the performance of the functions. Pure capital and risk-taking arrangements, i.e. arrangements that relate simply to possessing the capital necessary to initially assume and subsequently bear risks, can exist between independent enterprises. For example, one independent enterprise can enter into a legally binding agreement to guarantee all the risks assumed as a result of the functions performed by another independent and legally distinct enterprise. In such a case, the capital needed to support the risks assumed resides in a different legal entity from that in which the transactions giving rise to the risks are booked.

188. However, one of the key factual conditions of a global trading enterprise trading through PEs is that capital and risks are not segregated from each other within the single legal entity. To attempt to do so for tax purposes would contradict the factual situation and so would not be consistent with the WH. Rather, as can be seen from later sub-sections, the WH uses a functional and factual analysis to attribute risks, and then attributes capital to support the risks so attributed. Accordingly, it is not possible for one part of the enterprise to be treated as possessing the capital needed to support a certain amount of risks assumed where those risks have been properly attributed to another part of the enterprise following the functional and factual analysis.

189. As noted for banks, tax issues arise particularly where the same function is performed in more than one location : a “split function business”. In such cases, the functional analysis would have to examine in detail the true nature of the functions performed, especially in order to determine the true risk-taker where the key entrepreneurial risk-taking functions are split between different locations (see paragraphs 197-205). For example, the functional analysis at the time the financial instrument was created might show that one of the locations had in fact not really acted as the risk-taker but rather had performed an origination function. The location that had actually evaluated the risks related to the transaction and had made the decision to accept and manage those risks would therefore be treated as the “economic owner” and so would be allocated the financial instrument and its associated income, whilst the location which performed the origination function would be rewarded with an arm’s length remuneration.

190. This issue is very important for global trading, especially when trading/risk management activities are organised under the centralised product management or integrated trading models (see Section B-2(iii) above). In the centralised product management model, the marketing function is decentralised so as to be easily accessible to clients whilst the market risk management function for a particular book is centralised in one location. This means that the marketing and trading/risk management functions will often be conducted in different geographical locations leading to the existence of dealings between the centralised product management location and the various marketing locations. In the integrated trading model, all the marketing, trading and risk management functions are split as each trading location carries out all these functions in respect of common books of financial products. Therefore, there are potential dealings between all trading locations in respect of the the marketing, trading and risk management functions.

191. Additionally, as noted in Section C-2(ii), in some centralised product management models and in all integrated trading models there is not just a splitting of a particular function but also some level of integration between different functions, for example between the marketers and traders. The functional analysis of the PE should therefore evaluate the level of integration both within, and between, functions performed by the PE. As discussed for global trading undertaken between associated enterprises, such integration may need to be taken into account when determining the arm’s length remuneration for the performance of an integrated function.

a) Assets used

192. As well as analysing each of the functions performed by the PE in detail, it is also necessary to consider what assets are used and what risks are assumed in performing those functions. In terms of intangible assets used, the most important intangibles used in a global trading business have already been identified in Section B-3(ii) above. It is not considered there are any problems particular to global trading which require guidance beyond the general guidance already given in Part I of this report, although once again it may be more common for global trading business to share the use of assets. For example, under the integrated trading model, the various trading locations may share the use of the intangible represented by a

proprietary system for managing market risk by using it sequentially, or even at the same time. Moreover, each location may play a role in the development of that intangible.

193. There may be consequences of attributing intangible assets to the PE based on use. For example, the PE may use an intangible asset that allows it to earn a higher gross margin on its derivative contracts. The gross margin attributed to the PE would therefore reflect the use of that intangible asset. However, where that intangible is treated under the WH as “belonging” to another part of the enterprise, the part that developed the intangible, then there would need to be a deduction at fair market value in computing the profits of the PE to reflect the arm’s length dealing between the PE and the part of the enterprise that “owns” the intangible. The intangibles used are often unique and highly valuable, so there may be problems in establishing the arm’s length value of the dealing. As with situations outside the global trading field, profit methods may have to be applied. Similar considerations would apply where the transactional net margin method is applied so that the net margin earned should reflect both the use of the intangible and whether the intangible “belonged” to the PE.

b) Risks assumed

194. Part II of the Report took the position that for banks, in terms of risks assumed, it is generally the performance of the sales/trading function that generally leads to the initial assumption of the greatest risks (credit risk, operational risk and market risk). It is then the responsibility of the risk management function to ensure that the assumed risks are subsequently successfully borne so that losses from the realisation of the risks assumed are minimised. Consequently, as noted in Part II, it is the undertaking of these key entrepreneurial risk-taking functions that creates the possibility of significant loss for the bank and the need for minimum regulatory, including “free”, capital.

195. The overall conclusion for global trading businesses is similar. However, as noted in paragraph 83, there are differences between global trading and banking due to their different nature and the different risk profiles of loans and financial instruments. These differences are reflected generally in the types of functions performed and, in particular, the fact that functions equivalent to the sales/trading functions in a traditional banking business may be performed to some extent jointly by marketers and traders in global trading.

196. Where this occurs, the type of risks assumed will depend on the exact nature of the functions performed. As noted in Section B, marketers are particularly likely to be involved in the negotiation aspects of the marketing function, especially the evaluation of the credit risk, negotiation of the final price with the customer and the subsequent contact with the client. Consequently, under the WH, it is the performance of such marketing/dealing functions that lead to the assumption of credit risk. Conversely, if the marketing location does not play a meaningful part in the negotiation of the contract but plays a general sales role of just introducing the client to the firm and the products it offers, then the sales function is unlikely to lead to the assumption of credit risk, or indeed any other risks related to the financial product.

197. Even where the marketing function includes some aspects of the marketing/dealing functions, (e.g. the negotiation of the terms of the contract with the client), the minimum price at which the contract would be acceptable is still likely to be determined by the trader/risk manager. This is because in order to commit the capital of the global trading enterprise the trader/risk manager needs to work out the market risk assumed under the contract as well as how to manage the market risk so assumed in the most cost efficient manner. Consequently, it is the performance of those functions that leads to the assumption of market risk.

198. Accordingly, the determination of which part of the enterprise assumes market risk will be influenced by the organisation of the trading/risk management function. Under the centralised product management model, a functional analysis is likely to show that the functions performed by the marketing location do not normally lead to the assumption of market risk by the marketing location. The functions leading to the assumption of market risk, as well as the functions related to the subsequent management of that risk, are performed by the centralised product management location. However, where the marketing location undertakes the negotiation aspects of the sales/trading function, that function may lead to the assumption of credit risk by that location.

199. Where neither credit or market risks are assumed, this may be properly reflected by the fact that the financial instrument is never shown on the books of the PE, or if it is, the financial instrument is immediately transferred to the part of the enterprise undertaking the centralised product management. In other cases, where credit risk but not market risk is assumed by the marketing location, the booking of the contract in the marketing location together with the immediate transfer of the market risks to the centralised product management location, perhaps by means of a back-to-back derivative dealing at an arm's length price, would properly reflect the assumption of market risk by the centralised product management location and the assumption of credit risk by the marketing location. Alternatively, this situation could be reflected by booking the financial instrument in the centralised product management location and rewarding the marketing location by means of an arm's length remuneration that reflects the credit risk assumed in the marketing location. Dealings between the PE and the other parts of the enterprise, such as the back-to-back derivative dealing referred to above, would be evaluated under the second step of the WH (discussed in section D-2).

200. Under the separate enterprise model, the PE operates as if it were a separate profit centre and so a functional analysis is likely to show that the assumption of credit risk and market risk takes place in the PE as well as the subsequent management of those risks.

201. Under the integrated trading model, a functional analysis is likely to show that both the credit and market risks are initially assumed by the location that enters into the deal with the customer, although those risks are subsequently managed by all the trading locations on a portfolio basis. However, the other transactions making up the portfolio will have originated in other trading locations. Therefore, each trading location in fact carries out the marketing, trading and risk management functions in respect of a common book of financial products. Therefore, there are potential dealings between all trading locations in respect of the marketing, trading and risk management functions.

202. As noted in Section B-2(iii), the organisation of some global trading businesses may not fall neatly within any of the models. In particular, some of the marketing/dealing and trading/risk management functions or even some aspects of those functions may be split between locations to some extent. In such cases, the assumption of risks associated with the performance of those functions might also need to be split between the various locations undertaking the related functions.

203. In conclusion, a thorough functional analysis will be needed in order to determine which part of the enterprise performs the various aspects of the marketing/dealing and trading/risk management functions that are the key entrepreneurial risk-taking functions and so will be treated as assuming the risks associated with the performance of those aspects. Particularly in the centralised product management model, or hybrids between that model and the integrated trading model, different parts of the enterprise may assume different risks. For example, the various marketing locations might assume the credit risk, whilst the assumption of market risk is concentrated in the centralised product management location. Further, where functions are split between locations there will be a similar split in the assumption of risk. A functional and factual analysis will also be needed in order to determine whether the part of the

enterprise that assumes the risk also performs the function of managing the risks once assumed and, if not, which other part of the enterprise is performing the risk management function.

204. Having appropriately determined the functions performed, the assets used and the risks assumed by the PE, the next question is how to reward those functions. The preferred method under the WH is to do so by attributing the financial instruments based on where the key entrepreneurial risk taking functions described in this section are performed, i.e. where the instruments are “economically owned”. This will give the location performing those functions (the “economic owner”) the income from the financial instruments. This income can be viewed as representing an arm’s length reward for performing the various functions necessary to create and manage the financial instrument (taking into account assets used and risks assumed) and so part of the income represents a reward for the capital needed to support the risks related to that instrument. Of course, the “economic owner” of the assets will also have attributed to it necessary expenses both in terms of rewards for services it has received (from third parties or other parts of the enterprise) and the expense related to funding the financial instruments, including any adjustment as a consequence of the “free capital” attributed to the PE.

205. The financial instruments and risks recorded in the accounts and books of the PE form a practical starting point for this attribution and should be respected for tax purposes, provided they are consistent with the functional analysis. There may however be cases where the accounts and records are inconsistent with the functional analysis, for example because material amounts of financial instruments and risks may be booked in locations even though none, or very few, of the functions related to their creation or subsequent management were performed there. Respecting the booking location in such cases would not lead to an arm’s length attribution of profit.

206. This is why the basis of the WH is that financial instruments and risks would be attributed to a global trading PE by reference to a functional and factual analysis. Following the aggregation principle of the TP Guidelines (see paragraph 1.42) this analysis may be performed at the level of portfolios of similar instruments and risks, rather than for each individual instrument and risk.

207. Where the functional analysis has determined that the PE alone has performed the key entrepreneurial risk-taking functions, the PE will be attributed the newly created financial instruments and risks. Where the functional analysis shows that key entrepreneurial risk-taking functions related to the creation of the instrument are performed partly in one jurisdiction and partly in another, this raises the issue of which part of the enterprise should be considered the economic “owner” of the financial instrument and so have attributed to it the benefits and risks of ownership of the instrument, in the form of the associated income and expense. This determination is to be based on the functional and factual analysis. For a global trading enterprise this will generally be based on where the marketing/dealing and trading/risk management functions were performed. This is on the basis that it is the performance of those functions that generally leads respectively to the assumption of credit and market risks and it is the assumption and management of those risks that requires capital to meet any losses resulting from the realisation of those risks.

208. Where the functional analysis has determined that the PE alone has performed all aspects of the marketing/dealing and trading/risk management functions (eg under the separate enterprise model and in some cases in which the centralised product management model is used), the PE will be attributed the portfolio of newly created financial instruments and risks (both credit and market risks) associated with the performance of those functions. However, as noted in Section D-1 (i) above, especially where global trading is organised under the integrated trading model, or a hybrid between that model and the centralised product management model, the functional analysis under the first step of the WH is likely to show that the functions related to the creation and subsequent risk management of the portfolio of financial instruments are performed partly in one jurisdiction and partly in another. This raises the issue of which

part of the enterprise should be considered the “owner” of the portfolio of financial instrument and risks. As noted in Section D-1(i)(b), this determination is to be based on the functional and factual analysis of where the key risk taking decisions are made.

209. Where the functional analysis determines that the significant functions were performed in only one location and that the other locations performed less significant functions, the location performing the significant risk taking functions would have the individual assets and risks or the portfolio of financial instruments and risks attributed to it and so be treated as the “owner” of the individual assets or the portfolio and the associated income and expense. Especially in the integrated trading model, the functional analysis may show that the significant risk taking functions have been performed in more than one location so that the financial instruments or portfolio of financial instruments can be considered as owned jointly. The issue of how to attribute jointly owned portfolios of assets and risks is discussed in section D-2 below.

210. Events subsequent to the creation of the financial instruments and risks may also affect where they are ultimately attributed. Subsequent transfers may lead to the financial instruments and risks being wholly or partly attributed to another part of the enterprise, provided those transfers are recognised for tax purposes following the guidance given in section D-2 (iii)(c) below. Further, that attribution would also have to take into account any subsequent events leading to the financial instruments and risks portfolio becoming jointly owned.

211. For example, where key entrepreneurial functions, such as market risk management, are transferred to another part of the enterprise, the financial instruments and risks might be treated as partly attributable to the part of the enterprise that created them and partly attributable to the part of the enterprise that is performing the risk management functions. This attribution would be made on the basis of the functions performed and would also need to take into account the risks transferred and the risks retained.

(ii) Attributing creditworthiness to the PE

212. Just as for bank PEs, global trading PEs generally enjoy the same creditworthiness as the enterprise as a whole, which for example enables them to enter into interest rate swap contracts with customers on the same terms as the head office. To postulate that Article 7 requires that the branch should not enjoy that creditworthiness, but should be treated as having a lower creditworthiness than the enterprise as a whole, would produce an unrealistic attribution of profit. So as concluded for banks, there is no justification for hypothesising dealings similar to guarantee fees in order to give the PE the same creditworthiness as the global trading enterprise of which it is a part.

213. In conclusion, just as for banks, the hypothesised distinct and separate enterprise should have the same creditworthiness as the global trading enterprise as a whole, except in the exceptional circumstances referred to in paragraph 29 of (revised) Part II. In such cases it will be necessary to determine the creditworthiness of the PE, for example, by reference to independent enterprises in the PE jurisdiction that are comparable in terms of assets, risks, management etc or by reference to objective benchmarks such as credit evaluations from independent parties that evaluate the PE based on its facts and circumstances and without reference to the enterprise of which it is a part.

(iii) Attributing capital to the PE

214. As noted in paragraph 129 of Part I, it will be necessary to ensure an appropriate attribution of the enterprise’s capital to a PE in order to ensure an arm’s length attribution of profits to the PE. This section considers how to determine the arm’s length amount of (a) “free” capital and (b) capital other than

“free” capital that should be attributed to a global trading PE. Part II describes how capital attribution and funding issues should be dealt with for banks under the WH. Further, as noted in Part I (paragraph 134), the proposal is that the same principles that apply to the attribution of capital to a bank PE should apply to non-bank financial institutions. Otherwise, there will be a considerable opportunity for tax arbitrage, e.g. financial institutions regulated as banks may get a different treatment from financial institutions carrying on similar activities that are not regulated as banks.

215. Global trading is an obvious example of such an activity as it is carried on both by banks and by institutions that are not banks. Paragraph 135 of Part I provides a definition of “non-bank financial institution” and enterprises that carry on global trading that are not banks will fall within this definition, either because they are subject to financial regulation in a manner similar to banks, they risk-weight their financial assets or they measure the risks arising from the ordinary course of business. In short, the principles for allocating capital in Part II will apply to global trading activity whether or not the activity is carried on in an entity regulated as a bank.

216. Just as for banks, there may be no need to actually allocate any capital to a global trading PE for regulatory purposes. This should not however affect the attribution of capital for tax purposes. Consequently, an arm’s length attribution of capital to the PE may have to be made to ensure an arm’s length attribution of taxable profit to the PE, even though no capital has actually been allocated to the PE for regulatory or other purposes.

(a) *Attributing “free” capital to the PE*

Step 1 - Measuring the risks attributed to the PE

217. As noted in Section D-1 (i), the WH uses a functional and factual analysis to allocate financial instruments and risks to the PE and the same section also notes that capital and risk are not segregated within a single legal entity. It follows that under the WH it is necessary to attribute “free” capital to the PE in accordance with the risks attributed to that PE, and that it is therefore necessary to measure those risks. Accordingly, attributing capital based on the quantum of risks (including risks arising from off-balance sheet items) reflects the role of capital for financial businesses and by following the same principle for all types of financial businesses has the additional advantage of helping to ensure a level playing field amongst different types of financial institutions.

218. The question remains as to how to apply the principle stated above in practice. Measuring risks is difficult and flexibility is required. The approach to measuring the risks associated with financial instruments is similar in principle to the approach used for banks (see Part II). For global trading enterprises that are regulated as banks, it may be possible to follow the regulatory approaches for measuring risk.

219. The importance of risk for global trading enterprises means that such institutions are likely to try and measure the risks arising from their global trading operations. This may be done for business reasons and/or to meet local regulatory requirements. The approach set out in Part I for non-bank financial institutions and at paragraph 92 of revised Part II can therefore be followed for global trading enterprises. Accordingly, it should be possible to use the global trading business’s own risk measurement models, provided that they are consistent with the arm’s length principle, are approved by the regulators (where appropriate), are applied consistently and sufficient details, for example the assumptions underlying the bank’s internal model, are made available to all the relevant tax authorities to satisfy themselves that the above conditions have been met. Issues arise because the risk models of banks are generally developed and

applied on a consolidated basis. When necessary, these models and other systems would need to facilitate the determination of risk weighting at the PE level.

220. Moreover, it should be borne in mind that the WH is to measure risks in accordance with the arm's length principle, rather than to follow regulatory approaches for measuring risks. Regulatory developments will need to be carefully monitored to ensure that any changes do not affect the reliability of any regulatory approach as a proxy for determining an arm's length attribution of financial assets and risks to a global trading PE.

Step 2 – Determining the “free” capital needed to support the risks attributed to the PE

221. Having measured the risks attributed to the global trading PE, the next step in order to apply the arm's length principle is to determine how much of the enterprise's “free” capital is needed to cover those risks under the arm's length principle. Here the approach is follow the conclusion for banks and to apply the valid approaches described in Part II for all global trading enterprises even if they are not banks.

(b) Attributing capital other than “free” capital to the PE

222. As indicated in Part II (Section D-1 (iii) (b)), banks are likely, for commercial or tax reasons, to include in their regulatory capital not just “free” capital but also other types of semi-permanent interest bearing capital such as subordinated debt. Investors require a higher return on such debt to reflect the restrictions on such debt as compared to conventional debt. Under the arm's length principle it will be necessary to take such capital into account in order that the PE can deduct the right amount of interest expense. For example, if Tier 2 subordinated debt is raised by one part of the enterprise, it would not be correct for this part of the enterprise to bear all the interest expense in respect of debt that was raised for the benefit of the bank as a whole. The approach here also is to follow the conclusion for banks and to apply the valid approaches described in Part II for all global trading enterprises even if they are not banks.

iv). Adjusting the funding costs claimed by a PE

223. Finally, once the arm's length amount of capital attributable to a PE has been determined, a comparison needs to be made with the actual capital, if any, allotted to the PE by the enterprise. Where the amount of capital allotted by the enterprise is less than the arm's length amount as determined above, an appropriate adjustment may need to be made to the amount of funding costs claimed by the PE in order to reflect the amount of the enterprise's capital that is actually needed to support the activities of the PE. The guidance in Part II (Section D-1 (iv)) for adjusting the interest expense of bank PEs can be applied in the global trading context. The term “funding cost” is used instead of interest expense as global trading enterprises use a variety of financial instruments to fund their positions, e.g. repos and swaps, and the return on some of these instruments may not be treated as interest under the law of the PE jurisdiction.

D-2 Second step: determining the profits of the hypothesised distinct and separate enterprise based on a comparability analysis

224. As noted in Part I of this Report, the functional and factual analysis of the first step of the WH will have appropriately hypothesised the PE and the rest of the global trading enterprise as associated enterprises, each undertaking functions, using assets and assuming risks. Portfolios of financial instruments and risks will also have been attributed to the PE as the “economic owner” of those portfolios as a means of rewarding the key entrepreneurial risk-taking functions leading to the creation (marketing/dealing and

trading) and subsequent risk management of those portfolios. Further, as noted above, other important characteristics (e.g. “free” capital and creditworthiness) will also have been appropriately hypothesised to the PE and the rest of the enterprise.

225. The second step of the WH goes on to apply, by analogy, the guidance in the Guidelines to any economic relationships (“dealings”) between the PE and the rest of the enterprise. For example, although a portfolio of financial instruments and risks may have been attributed to the PE in country A by virtue of the fact that the PE undertook the relevant functions, it may be that other parts of the enterprise performed other functions related to the portfolio. These functions would need to be rewarded in order to ensure that the PE in country A is attributed an arm’s length profit. Under the WH, the preferred approach would be to record all the income from the financial instruments in the books of the PE in Country A as the “economic owner” of the portfolio and to attribute an expense or outgoing to A in respect of dealings representing an arm’s length reward for the functions performed by other parts of the enterprise. Further, the concept of comparability analysis will be used in order to attribute profit in respect of those dealings by making a comparison with transactions undertaken between independent enterprises.

226. General guidance on making such comparisons has been provided in Section C-2 (ii) of Part I of this report. This section discusses how to apply that guidance to some special situations found in global trading.

(i) *Recognition of dealings*

227. As noted in Part I of this Report, the guidance at paragraphs 1.28-1.29 and paragraphs 1.36-1.41 of the Guidelines can be applied, by analogy, to determine whether a dealing has taken place and whether the dealing as structured by the taxpayer can be disregarded or re-characterised. It will be necessary first of all to determine whether any dealing exists in relation to the PE before deciding whether the dealing, as found, should be used as the basis for the analysis used to determine an arm’s length attribution of profit. In terms of the threshold question, Part I of this Report goes on to note that a dealing should not be found between different parts of the enterprise unless it relates to “a real and identifiable event (e.g. the physical transfer of stock in trade, the provision of services, use of an intangible asset, a change in which part of the enterprise is using a capital asset, the transfer of a financial asset, etc.)” that has transpired between them. The paragraph concluded that, “A functional analysis should be used to determine whether such an event should be taken into account as an inter-branch dealing of economic significance.”

228. Just as for banks, it is considered relatively straightforward in principle to apply the above guidance to dealings related to the provision of services within a global trading enterprise. As noted in subsection (iii)(e) below, the general guidance in Part I should be capable of being applied in the global trading context.

229. However, there are more problems when trying to apply that guidance to dealings in relation to financial assets, given the nature of a global trading business. Its stock in trade is its financial assets - its financial instruments such as bonds, repos, derivative products etc. However, such instruments are not physical in the sense that they exist only as contractual arrangements and as entries in the accounting records. Unlike a physical asset, it can be difficult to determine where in a global trading enterprise the financial instruments are located, and, once located, whether they have been transferred to another part of the enterprise or whether another part of the enterprise has begun to use them. A particular problem for global trading is that the various risks associated with a particular financial instrument can be “unbundled” and risk managed in different locations (see example of a Euro-denominated note with principal amount tied to the performance of the DAX index in Section B-3(i)(b)). These difficulties are compounded by the

impact of regulation which can mean that financial instruments are “booked” in a location where none of the functions related to the creation, or ongoing management, of that instrument have been, or will be, carried out (see sections B-3 (ii) and (iii)). The effect of the above is that there are likely to be a lot of internal dealings within a global trading enterprise which will have a significant impact on the attribution of profit.

230. As discussed under the first step, in the context of the PE it is not possible to rely on contractual agreements as can be done between legally distinct enterprises and so instead, the WH relies ultimately on the functional and factual analysis to determine where financial instruments and risks are “economically owned”, rather than on where they are booked. Logically, the same principles must also apply in relation to any dealings purporting to transfer “ownership” of financial instruments and risks to another part of the enterprise. Financial instruments and risks are not “economically owned” where they are booked if the key entrepreneurial risk-taking functions related to the creation of the financial instrument have not been performed there. Similarly, an accounting entry resulting from an internal swap dealing that removes the market risk in respect of a financial transaction from the books of one PE and transfers it to the books of another part of the enterprise would not amount to a dealing unless the transfer was accompanied by a transfer of the key entrepreneurial market risk management function and the transfer of the assumption of market risk and the appropriate portion of the dealer spread (after deducting the portion which should remain with the marketing location) and the trading profit potential of the financial instrument. The use of internal swap arrangements to move risk within the global trading enterprise is discussed in more detail in Section D-2 (iii).

231. Furthermore, there are circumstances in which the transfers of assets and risks would not be recognised because the transfers were not made under the normal commercial conditions that would apply between independent enterprises (see 1.38 of the Guidelines which discusses the circumstances in which transactions between associated enterprises would be similarly not recognised or would be restructured in accordance with economic and commercial reality. As noted in section C-2 (ii) of Part I of this Report, where an examination of the conduct of the parties shows that the terms of the dealing were not followed so that there was no real transfer of related functions or of the risk or profit potential of the asset, the transfer of the asset would be viewed as a sham and so would be ignored for tax purposes. Similarly, transferring where an existing financial instrument is booked, without transferring any of the functions, risks and associated profit potential of the financial instrument would not result in a change of use of that asset or any dealing in respect of that asset.

232. Issues arise as to how far dealings should be recognised on the same basis as transactions between associated enterprises. The conclusion in Part II is equally applicable to global trading. Once the above threshold has been passed and a dealing recognised as existing, the WH applies, by analogy, the guidance at 1.36-1.41 of the Guidelines. This means that, except in the 2 circumstances outlined at paragraph 1.37, tax administrations “should not disregard the actual *dealings* or substitute other *dealings* for them.” Practical issues related to the valuation of internal dealings may arise, especially where market data is not available although such difficulties may also occur in respect of the valuation of transactions between associated enterprises. Further, some members of the Steering Group are still considering whether the WH, as currently expressed, provides sufficient protection against tax motivated transfers, e.g. through internal hedging arrangements. (See paragraph 252 below).

(ii) *Applying transfer pricing methods to attribute profit*

233. Having established that a dealing has taken place and that the dealing as structured by the taxpayer would not need to be disregarded or re-characterised the next issue is to determine whether the profit attributed to that dealing is at arm’s length. This is done by applying the guidance in the Guidelines

on comparability, by analogy, in the global trading PE context. This is done by making a comparison of the reward earned from *dealings* within the global trading enterprise with comparable *transactions* between independent enterprises, having regard to the 5 factors for determining comparability set out in Chapter I of the Guidelines.

234. Further, the WH provides that all the methods in the Guidelines can be applied in the PE context in order to determine the profit to be attributed in respect of the dealing by reference to comparable uncontrolled transactions. Section C-3 discusses the use of profit split methods where global trading is conducted solely through associated enterprises. It is considered that generally that guidance can be applied, by analogy in the PE context.

235. An important issue does however arise in respect of capital. Between independent as well as associated enterprises, it is possible for arrangements to be made such that the capital necessary to support the global trading risks resides in a separate legal enterprise from the enterprise where the risks are actually assumed as a result of the global trading activity. Moreover, that enterprise may not perform very many, if any, of the key entrepreneurial risk-taking functions. In this case, any arrangement involving the possession of capital might be rewarded in the form of a share of profits under a profit split method. However, under the WH, where one enterprise both possesses the capital and performs the global trading functions, the total capital of the enterprise that supports the risks would be attributed to the parts of the enterprise performing the global trading functions that created and subsequently managed those risks. There would not therefore be a part of the global trading enterprise that could be identified as just a “capital possessor”, i.e. that possesses capital but does not perform very many, if any of the global trading functions. It would not therefore appear possible under the WH to have a separate reward for any arrangements involving the possession of such capital in the PE context.

(iii) *Global trading functions*

236. Part II of the Report discusses a number of issues related to traditional banking functions. This section discusses some issues of particular relevance for global trading.

a) Analysis of trading/risk management models

237. If all the key entrepreneurial risk-taking functions necessary to create and subsequently manage the portfolio of financial instruments and risks were performed by the PE, there may be little difficulty in determining an arm’s length reward for the performance of those functions. This is the situation normally found under the separate enterprise trading model. Any transactions related to the performance of the functions are likely to have been conducted directly by the PE and so should be at arm’s length prices, either by definition, because they are conducted with independent enterprises, or by application of the usual transfer pricing rules if conducted with associated enterprises.

238. However, it should also be noted that there may still be some attribution issues in relation to other functions not related to the creation and subsequent management of the portfolio. For example, the provision of general support and an appropriate infrastructure e.g. centralised Head Office functions. There are no issues particular to global trading for these functions and so the guidance in Parts I and II of the Report should be followed. However, especially where global trading is organised under the centralised product management or integrated trading model, the first step of the WH is likely to have shown that some of the key entrepreneurial risk-taking functions leading to the creation and subsequent management of the portfolio of financial instruments and risks were performed by different parts of the enterprise (split functions). Those functions represent dealings between the PE and the other parts of the enterprise which

will have to be taken into account under the second step of the WH in order for the PE to receive an arm's length attribution of profit.

239. As noted in Section C, under the centralised product management model, the key entrepreneurial risk-taking functions (negotiation, trading and risk management) are all undertaken in one location. Just as when global trading is conducted only through associated enterprises, there should, in theory, be few problems in evaluating the trading or risk management functions for the pure centralised product management model in the PE context. Only one part of the enterprise is taking the full responsibility for these key entrepreneurial risk-taking functions and so will receive the profits attributable to the performance of those functions as a result of transactions with independent parties. Other parts of the enterprise are likely to perform support or sales functions. These are dealings which must be evaluated but as noted in Section C there may often be comparable transactions between independent enterprises that can be used in order to attribute an arm's length profit to these dealings. The guidance in Section C should therefore be followed, by analogy, in such cases and it is not considered that there are any particular difficulties in principle in applying that guidance, by analogy, in the PE context.

240. As noted in Section C, under the integrated trading model, the key entrepreneurial risk-taking functions (negotiation, trading and risk management) with respect to a particular third party transaction may be split between locations (that is, the entrepreneurial risk-taking role itself is split) and the gross profit arising from that transaction may be recognised in any or all of the locations. Negotiation, trading or risk management in integrated form is unlikely to be found between independents and so it may not be possible to make "reasonably accurate adjustments" to make the data comparable. Additionally, in the integrated trading model each location cannot act independently but must co-operate with the others in order to successfully enter into a transaction and subsequently manage the resulting risk. Therefore, it may not be possible that traditional transaction methods could be applied reliably and so consideration should be given to profit methods.

b) **Attributing assets and risks to more than one part of the enterprise**

241. Under the first step of the WH, the financial instruments and risks created by the performance of the key entrepreneurial risk-taking functions by the PE will have been attributed to the PE. The effect of this would be to attribute to the PE performing these functions the income or losses produced by those instruments. This will be at arm's length prices, either by definition, because it is received from independent enterprises, or, by application of the usual transfer pricing rules, if received from associated enterprises. Where the financial instruments have been attributed wholly to the PE, in order to attribute an arm's length profit to the PE, all that is necessary would be to determine the arm's length prices for any dealings resulting from the performance of the other global trading functions described in Section B.

242. However, as noted in Section D-1, some financial instruments might be jointly attributed to the PE and another part of the enterprise. This joint ownership creates a dealing that has important consequences for the attribution of profit. This is because the attribution of the financial instruments, the profits from those instruments and the associated "free" capital follows the key entrepreneurial risk-taking functions. The relative value of the key entrepreneurial risk-taking functions performed in the different parts of the enterprise may be used to attribute the portfolio and consequently the "free" capital necessary to support that portfolio.

243. The guidance in the Guidelines will be applied, by analogy, in order to determine the relative contribution of the key entrepreneurial risk-taking functions performed in the different parts of the

enterprise. All the methods approved in the Guidelines are available to make this determination, starting with the traditional transaction methods described in Chapter II.

244. However, as noted in Section C for associated enterprises, it may be difficult to find uncontrolled transactions comparable to the dealings. Such problems are not confined to PEs and occur with increasing frequency in transactions between associated enterprises. Again, Chapter III of the Guidelines approves the use of profit methods to be applied in situations where the traditional transaction methods of Chapter II cannot be applied reliably. Such profit methods would determine both the share of the profits earned from the financial instruments as well as how they would be attributed for the purposes of capital attribution. For example, taking into consideration similar issues to those outlined in section C-3 and the general guidance in Chapter III, if it were determined under a profit split method that 40% of the profits from a global trading book were attributable to the PE in Country A, 40% were attributable to the head office in Country B and 20% were attributable to a PE in Country C, the financial assets represented by the global trading book would similarly be attributed 40% to the PE in Country A, 40% to the head office in Country B and 20% to the PE in Country C.

c) Risk management functions and internal transfers of risk

245. The WH applies equally to the functions described in Section B above that are necessary to monitor and manage the risks associated with global trading. Section C-2 (ii) of the Report looks in detail at risk monitoring and risk management functions and Section D-2(iii)(e) of Part II discusses risk management functions particularly in relation to transfer of market risk between associated enterprises and transfer of risks in the context of a bank PE. It is considered that the guidance in those Sections can be applied in the global trading context. However, given the importance of market risk management in a global trading business this section discusses the transfer of market risk between different parts of a global trading enterprise in more detail.

246. This problem may be analysed by considering one popular form of internal derivative contract - the so-called "mirror swap". In a mirror swap, the branch marketing a transaction with a third party enters the customer transaction on its books and then enters into a related internal "transaction" with the trading location that will manage the trading or market risk arising from the real transaction. There is usually a difference in terms that leaves a "spread" in the marketing branch, for example a number of basis points on an interest rate swap. The spread is intended to reward the marketing branch for the sales/marketing functions it has performed, for the credit risk it has assumed and for any ongoing credit risk monitoring or credit risk management activities it undertakes. In short, "mirror swaps" provide a potential mechanism for rewarding the different functions performed by an enterprise engaged in some form of global trading and reflecting the fact that different locations assume different risks as a result of the different functions performed. In the transaction described above, the mirror swap, if entered into on arm's length terms should reward the performance of the market risk management function, provided that the location that receives the mirror swap actually carries out that function. Of course, mirror swaps that are not entered into on arm's length terms and that do not appropriately reflect where the market risk management functions are performed would have the effect, if recognised, of inappropriately shifting future trading profit or loss between different locations, and are therefore unacceptable for tax purposes.

247. Therefore, under the WH, first of all it must be decided whether such internal derivative contracts that purport to transfer market risk should be recognised as a dealing to be taken into account when attributing profits. As discussed in Part I of this report, the WH relies on a functional and factual analysis to determine whether there has been "a real and identifiable event" which would give rise to a dealing to be taken into account for the purpose of attributing profit. In the context of a "mirror swap", the book entry showing the transfer between the different parts of the enterprise must be accompanied by a real

and identifiable event, i.e. a genuine change in the part of the enterprise that is managing the market risks assumed as a result of the customer transaction. Further, the transfer of the market risk management function must also be accompanied by the assumption of the market risk and the appropriate portion of the dealer spread (after deducting the portion which should remain with the marketing location) and the trading profit potential of the financial instrument relating to the customer transaction. The part of the enterprise receiving the mirror swap would also have to suffer any future losses related to the realisation of the market risks from the transaction e.g. from adverse market movement, whilst the marketing branch would have to suffer any future losses related to the realisation of the credit risks from the transaction, e.g. as a result of customer default.

248. If the mirror swap is recognised as a dealing under the recognition test of the WH, the next stage is to attribute profit in respect of that dealing. It will be necessary to check that the conditions of the mirror swap or other internal swap payment are at arm's length. As noted in the paragraph 251 of the Global Trading Report, there may be problems with using mirror swaps without adjustment. Due to the large number of transactions the spread is not usually negotiated individually for each transaction but is often set at a fixed level depending on broad categories of instruments. There are however differences between marketing, for example, a simple fixed-for-floating US dollar interest rate swap that took two minutes to conclude and marketing a complicated cross currency equity swap with an equivalent notional principal amount that took three months to negotiate and structure. Unless these differences can be taken into account, the spread earned by the marketing branch will generally not reflect the arm's length principle.

249. Further, an evaluation may have to be made of exactly what types of risk are transferred and what types of risk are retained. All the different types of risks, including credit risk and market risk are assumed by the enterprise when the transaction is entered into by the customer with the marketing branch. If that transaction is with the market risk management location, the marketing branch is no longer responsible for market risk, even though it was responsible for the initial assumption of those risks. However, the credit risk will remain in the marketing branch as there has not been any change of function in respect of that risk.

250. Another form of internal risk transfer relates to credit risk. The part of the enterprise with the credit department (usually the head office) may indemnify the other parts of the enterprise against default by the counterparty. Such a transfer may be recognised provided that the credit department actually carries out the evaluation, monitoring, and ongoing management of the credit risk. Such a dealing only transfers the credit risk - the market risk remains with the part of the enterprise that entered into the transaction with the customer.

Comments from the business community are particularly invited on the issues related to the shifting of risk from one part of an entity to another, particularly transfers of credit risk and whether the use of internal credit derivatives would be acceptable.

251. The recognition of the internal dealing will also impact on the attribution of capital to the PE (see section D-1 (iii) above). For example, suppose that net present value is used as a proxy for measuring the assets and risks for capital attribution purposes and that the net present value (NPV) of a derivative transaction when entered into with the customer was 10. Where all the risks of the customer transaction are transferred as a result of the mirror swap then the trading/risk management location would be treated as having financial assets and risks with an NPV of 10 for the purposes of capital attribution. Where however a spread was left in the sales branch with an NPV of 1, then the trading/risk management location would be treated as having financial assets and risks with an NPV of 9.

252. As noted in Part I, some countries consider that the WH, as expressed in this and in the previous section, does not provide sufficient protection against tax motivated transfers of assets and risks. However, it should be noted that the WH only determines the attribution of business profits in respect of a financial asset and its associated risks. In order to meet the concerns expressed above, the onus should be on the taxpayer to demonstrate clearly that any dealing should be recognised as leading to a transfer of assets and risks. Moreover, countries may wish to ensure that the WH would not override any domestic legislation aimed at preventing abuse of tax losses or tax credits by shifting the location of financial assets or risks. In addition, where their domestic law does not recognise loss transactions in certain circumstances between associated enterprises, countries may consider that the WH would not require the recognition of an analogous dealing in order to determine the profits of a PE.

d) Treasury functions and internal movement of funds

253. Section D-2(iii)b of Part II contains guidance on this issue for banks that can be applied to global trading businesses. Global trading is often conducted by enterprises that are not banks and so a further issue relates to the determination of whether an internal transfer of funds should be recognised as a “real and identifiable event”, i.e. a dealing that could give rise to “interest” for a global trading enterprise that is not a bank. The current approach of the Model Commentary, described at paragraph 130 of Part I, makes a distinction between financial and non-financial enterprises based on the fact that the making and receiving of advances is closely related to their ordinary business (the “direct or indirect approach”). The WH rejects such an approach in favour of applying the comparability approach of the Guidelines (see Part I paragraph 89). In principle, this would depend on a functional and factual analysis of the dealing and the conditions under which it was performed.

254. As already noted, global trading is frequently undertaken by “non-bank financial institutions”. The funding of global trading operations was described in Section B-3 (i)(c) and this shows that the functional and factual analysis of such activities is likely to produce similar results as for traditional banking activities (see Part II of this Report). Recognition of internal “funding costs” in relation to those activities could be appropriate for the attribution of an arm’s length profit to a PE. Accordingly, it would not be necessary to separately attribute the actual funding expense of the enterprise, although it would still be necessary to attribute the actual “free” capital (see above).

e) Head office services

255. It is considered that there are no considerations peculiar to global trading that need to be taken into account in respect of such services, apart from the discussion in Section C-3 on rewarding back office service functions under a profit split method. Consequently, the guidance in Parts I and II of the Report can be applied in the global trading context. Further, it is not thought that there are any particular problems about applying, by analogy, the guidance in Section C-3 on rewarding back office service functions under a profit split method to global trading PEs as opposed to associated enterprises.

D-3 Global trading through dependent agent PEs

256. It is quite common for functions associated with a global trading business to be undertaken by dependent agents within the meaning of Article 5(5) of the OECD Model Tax Convention (a “dependent agent PE”), for example, where functions associated with a global trading business carried on by associated companies are conducted by a dedicated agent (“dependent agent enterprise”) which is itself a wholly-owned subsidiary of the global trading group and concludes contracts in the name of the booking enterprise. This Report does not examine the issue of whether a PE exists under Article 5.

257. In cases where a PE arises from the activities of a dependent agent, the host jurisdiction will have taxing rights over two different legal entities - the dependent agent enterprise (which is a resident of the PE jurisdiction) and the dependent agent PE (which is a PE of a non-resident enterprise). In respect of transactions between the associated enterprises (the dependent agent enterprise and the non-resident enterprise), Article 9 will be the relevant article in determining whether the transactions between the associated enterprises were conducted on an arm's length basis.

258. In respect of the dependent agent PE, the issue to be addressed is one of determining the profits of the non-resident enterprise which are attributable to its PE in the host country (ie as a result of the associated enterprise's activities which have been carried out on its behalf). In this situation, Article 7 will be the relevant article. Finally, it is worth stressing that the host country can only tax the profits of the non-resident global trading enterprise where the functions in the host jurisdiction performed for the non-resident enterprise exceed the PE threshold as defined under Article 5. Further, the quantum of that profit is limited to the business profits attributable to global trading operations performed in the host jurisdiction through the PE.

259. Where there is a dependent agent PE, the question arises as to how to attribute profits to the PE. As noted in Part I, the functional analysis under the first step of the dependent agent PE would have to take into account any functions undertaken by the dependent agent on behalf of the non-resident enterprise as well as any assets used and risks assumed as a result of the functions performed by the dependent agent enterprise itself. The analysis would also focus on the nature of the functions carried out and in particular whether key entrepreneurial risk-taking functions are carried out in the PE jurisdiction. In this regard an analysis of the skills and expertise of the employees of the dependent agent enterprise is likely to be instructive, for example in determining whether trading, negotiating or risk management functions are being performed in the jurisdiction of the PE.

260. It may happen in global trading cases for the dependent agent enterprise to be paid a service fee by the non-resident enterprise on whose behalf the dependent agent enterprise acts. Issues arise as to whether there would be any profits to be attributed to the dependent agent PE after an arm's length service fee has been paid to the dependent agent enterprise. The service fee should provide the appropriate remuneration for the functions performed (taking into account the assets used and risks assumed) by the dependent agent enterprise in its own right. However, a functional analysis of a transaction may show that the ability to assume the risks arising from the transaction is not found in the dependent agent enterprise, for example because it has insufficient capital to support the risks assumed. Rather the ability to assume the risks is generally found in the non-resident enterprise in whose books the transaction - and the resultant risk - appears. These risks, and therefore the capital needed to support them, will be attributed to the dependent agent PE to the extent that they arise from functions performed by the dependent agent or by the non-resident enterprise in the PE jurisdiction. In short, when attributing profits to the dependent agent PE, there are likely to be profits (or losses) over and above the arm's length service fee paid to the dependent agent enterprise.

261. The danger of overlooking the assets used and risks assumed in the performance of the functions in the PE jurisdiction are minimised if the existence of the dependent agent PE is formally recognised so that it is clear that the host country has taxing rights over two different legal entities - the dependent agent PE and the dependent agent enterprise and an attribution of profit based on a functional analysis is made to the dependent agent PE on the basis described in this section. This should also ensure that any other tax consequences arising from different rules for PEs and subsidiaries in the PE jurisdiction are taken into account. Profits will be attributed to the dependent agent PE based on a functional and factual analysis and in computing the profits of the agency PE, a deduction would have to be made for a fee paid to the dependent agent enterprise for the functions performed, computed in accordance with the OECD Transfer Pricing Guidelines. This fee would reflect the fact that under the functional analysis, the

dependent agent enterprise itself would not be treated as assuming any risks or using any assets of the non-resident enterprise.