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Valuation of Trade under long-term contracts

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OUTLINE

- Background
- Issues for discussion
- Case Study: Kingdom of Morocco
- Concluding Comments

Background: Lexical Recap

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Background : Lexical Recap

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1. Spot Price:

- The current price of the commodity

2. Forward Contract :

- physical exchange of a commodity will happen at a future date while price is previously decided. In a forward contract 2 parties are obliged to conclude the transaction at the agreed price.

3. Options:

- Party has the right(but not obligation) to buy or sell the commodity at a fixed price
- Options can be purchased /sold in the financial market generating a loss/profits to the vendor

4. Penalties:

- Withdrawing from a forward contract, could result in a party paying a penalty as stipulated in the contract.

5. Contract Price

- may differ from the spot price that is unknown when the contract has been made
- It is quite frequent that one of the two parties, or both, run to a financial derivatives to cover a part of the risks associated to this kind of transactions

6. Long Term Contracts :

- Long term contracts are similar to the forward contract, but they can have a very long temporal horizon, also more than five years, and a commitment of payments over time.

Background: Characteristics of Market Prices

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The market price is used as the basis for valuation of transactions (BPM6 para: 10.30 and SNA 2008 para:3.118 MITS 2010 Para 3:32)

What are the characteristics of market price ?

Market Prices have to be at arms length

BPM 6,para3.68: "Market prices for transactions are defined as amounts of money that willing buyers pay to acquire something from willing sellers; the exchanges are made between independent parties on the basis of commercial considerations only—sometimes called 'at arm's length.

Market Prices don't have to be competitive

In fact, a market transaction could take place in a **monopolistic, monopsonistic**, or any other imperfect market structure

Characteristics of market price ?

We are interested in all possible elements that can influence the market, but also the conditions referred to the specific agreement between the two parties involved.

Background : Factors influencing market price

1. **Risks related to markets**: for example country risk, exchange rate risk, price risk   etc.
2. **Methods of Payment** : high price may involve payment postponement
3. **Prices linked to prefixed index** (market index) to foster general coverage with financial derivatives.
4. **Inclusion of freight and transport** cost in perennial perspective

Background : Characteristics of Long-term contracts

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Are long term contracts forward –type contracts ?

3. BPM6 ,5.88 defines "A forward-type contract (forward) as an unconditional contract by which two counterparties agree to exchange a specified quantity of an underlying item (real or financial) at an agreed-on contract price (the strike price) on a specified date.

Are Long-term contracts considered futures ?

BPM6 ,Para 5.89 **Long term contracts could be considered futures**. Paragraph 5.89 goes on to define futures as: "Futures are forward-type contracts traded on organized exchanges. The exchange facilitates trading by determining the standardized terms and conditions of the contract, acting as counterparty to all trades, and requiring margin to be deposited and paid to mitigate risk.

Are the long term contracts tradeable in their own right ? .

BPM 5:80 defines "A financial derivative contract is a financial instrument that is linked to another specific financial instrument or indicator or commodity and through which specific financial risks (such as interest rate risk, foreign exchange risk, equity and commodity price risks, credit risks, and so on) can be traded in their own right in financial markets.

Conclusion:

1. Both forward and long term contracts are agreed in advance and could deviate from the spot price(contradicting both BPM and SNA)(see BPM6 10.30 and SNA 2008 3.118).
2. A determination of the features of the Long term contract is necessary

Conclusion : A global consultation is needed to determine if the long-term contracts are tradeable.

Background

- 1. **There is growing appreciation** **within the international statistics community that there is increasing use of financial derivatives to hedge exposures related to long-term trade contracts**.
  - More concisely, it is clear that large capital-intensive production of bulk commodities may require guaranteed returns on the investment which may frequently involve long-term contracts with either fixed prices or indexed linked prices supported by a floor. Overtime, contracts may deviate from the spot price for the commodities. In standard risk management practice, companies may seek to hedge risk by entering into forward derivatives.

2. Policymakers, trade analysts and researchers have called for more analytically comprehensive and integrated data on international trade and globalization

3. The main objective of this GN is to address the statistical implication of this phenomenon through making methodological advice in the context of minimizing global asymmetries across statistical standards of BPM,SNA MSITS and ITMS (2010) created in recording trade with long –term contracts

GN main output: To put forward a proposed treatment of trade under long-term contracts relevant to updates of BPM6/7 and its potential impact on MSITS and IMTS. This will occur against the background of Global consultation(through surveys) as a first step.

Issues for Discussion

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The issue

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- Specific guidance on the valuation of trade under long term contracts in external sector statistics is not provided in current international statistical standards, including the sixth edition of the Balance of Payments and International Investment Position Manual (BPM6).

Outcomes of GN C9: Trade in Long Term Contracts

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1. Trade with long term contracts

- pricing traded commodities is not a true reflection of the current market value and as such is not consistent with the symmetries associated with recording entries at market value across all external statistics (see BPM6 10.30 and SNA 2008 3.118).

MAIN PROPOSAL : The GN proposes to record the trade as taking place at the market (spot) price and to treat the long-term supply contract as a forward financial derivative. This will also include explanations of the metadata and revisions made.

Current international standards for the treatment of the issue:
UN (2013) International Merchandise Trade Statistics: Compilers Manual, Revision 2
UN (2016) Manual on Statistics of International Trade in Services 2010 Compiler's Guide

Impact of GN C9: Trade in Long Term Contracts

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1. Trade with long term contracts

- **Quantitative size of the issue:** OECD data highlights that for international trade in goods, large enterprises continue to dominate, and are among the largest contributors to the global trade balance. TEC data also provide information on the role of Small and Medium Enterprises (SMEs) in international trade, across industries and across countries, showing, for example, that although SMEs generally export to neighboring markets, they import from a much wider geographical base.

See http://www.oecd.org/sdd/its/trade-by-enterprise-characteristics.htm also GN.C.2 BOPCOM20/12

- **Key Takeaway : The dominance of large enterprises may also ncrease the probability of fixed price arrangements with input contractors**

Other Issues

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Issues of Statistical consistency

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Issue 1	Response	Outcome
Adopting spot prices creates the additional issue that the statistical value would deviate from the customs value. This could create practical problems regarding validation of the data and conceptual issues.	Maintain both in the manual. 1. The spot value to improve synchronization consistent with the market price concept (see BPM6 10.30 and SNA 2008 3.118). 2. The customs value consistent with the established status quo	Reduction in bilateral asymmetries

Issue 2	Response	Outcome
. In IMTS we have no information on whether or not contracts are long term and whether they are tradable or not.	the 1ST recommendation is to have a global consultation which aims at stock taking what is out there. **Possible outcomes** If they are not then they cannot meet the requirement of a financial derivative of being tradable as per BPM6 para. 5.80. and not be recorded in the financial account. 2.If they can meet the requirement of futures as per BPM6 para.5.88 then the disaggregation being contemplated would be possible and relevant.	Reduction in bilateral asymmetries

Case Study: Kingdom of Morocco

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Sommaire

Etudes miroirs : premier indicateur de qualité

Mirror exercise (Morocco-EU) carried out on foreign trade data for goods:

➯ **Significant discrepancies between Moroccan exports of fruits and vegetables (CHAP 07 AND 08) and EU imports.**

- ***Issue raised:*** underestimation of export values from Morocco for fresh produce sold on consignment.

- ***Proposed solution:*** The Standard Import Value, established by the European Commission for determining the EU entry price of certain fruits and vegetables.

Problématique des ventes en consignation

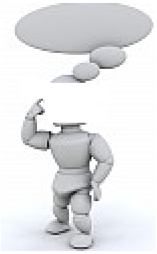
The export of goods under the consignment procedure:

<u>**the terms of the contract**</u>

The absence therefore of a final sale and of an invoice at the time of customs clearance leads to ***difficulties in determining the real value of the exported products.***

Exports declared to Customs with underestimated values!!

This explains and justifies the use of estimation methods that make it possible to approximate the statistical values of the goods to the real transactional values.



Data reassessment procedure

Recommendation: Adopt a reference price used to assess the export of fresh products:

the EU standard import value. (VFI)

The standard import value (VFI): is calculated from the average prices and quantities sold each day on the import markets defined as representative of the EU Member States. All the quotations of the day are then grouped and weighted according to the nature of the product and its origin.

(EUR/100 kg)

6.1.2012

Code NC	Code des pays tiers (1)	Valeur forfaitaire à l'importation
0702 00 00	MA	56,5
	TN	101,1
	TR	96,7
	ZZ	84,8
0805 10 20	CL	33,0
	MA	66,3
	TR	69,1
	ZZ	56,1

$$Valeur\,(p) = \sum_{j=01/01}^{31/12} [Qté\,(j) * VFI\,(j) * Cours\ de\ change(j)]$$

Declared unit price < **VFI**

Critère de réévaluation

(p): products (tomatoes, oranges, courgettes, clementines, lemon, etc.);
VFI (day j): standard import value (Eur/100kg) of the price of the product on day j.

Results of the reassessment

EVALUATION DES EXPORTATIONS DES PRODUITS FRAIS À DESTINATION DE L'UNION EUROPÉENNE
Année 2011

SH	Produits	Données des déclarations (sous-évaluées)			Données réevaluées * (base VFI)			Ecart de réevaluation	
		Valeur MDH	Poids mt	Prix DH/kg	Valeur MDH	Poids mt	Prix DH/kg	Valeur MDH	Prix DH/kg
070200	Tomates	738,9	203,7	3,6	1 329,9	203,7	6,5	591,0	2,9
080510	Oranges	336,9	75,3	4,5	449,9	75,3	6,0	113,0	1,5
080520	Clementines et mandarines	609,4	116,9	5,2	1 038,0	116,9	8,9	428,6	3,7
080550	Citron	25,9	5,4	4,8	29,5	5,4	5,4	3,5	0,7
	Total	**1 711,0**	**401,3**	**-**	**2 847,2**	**401,3**	**-**	**1 136,2**	**-**

*** Données réevaluées = Σ [Qté *(p,j)* * VFI *(p,j)* * Cours de change *(j)*]**
***(p,j)* = Produits (Tomates, Oranges...) au jour j.**

The result of the study shows a significant increase of +1,136.2MDH or +66.4% in the export value of tomatoes and citrus fruits.

Résultats de la réévaluation (1)

EVALUATION DES EXPORTATIONS DES PRODUITS FRAIS À DESTINATION DE L'UNION EUROPÉENNE

Année 2012

SH	Produits	Données des déclarations (sous-évaluées)			Données réevaluées * (base VFI)			Ecart de réevaluation	
		Valeur MDH	Poids mt	Prix DH/kg	Valeur MDH	Poids mt	Prix DH/kg	Valeur MDH	Prix DH/kg
70200	Tomates	597,2	146,4	4,1	1 066,4	146,4	7,3	469,2	3,2
70990	Courgettes	81,9	16,5	5,0	167,0	16,5	10,1	85,2	5,2
80510	Oranges	301,1	63,3	4,8	373,4	63,3	5,9	72,2	1,1
80520	Clémentines et mandarines	400,7	70,3	5,7	734,0	70,3	10,4	333,2	4,7
80550	Citron	9,9	1,4	7,3	14,5	1,4	10,7	4,5	3,3
	Total	**1 390,9**	**297,8**	**-**	**2 355,2**	**297,8**	**-**	**964,3**	**-**

*** Données réevaluées = Σ [Qté *(p,j)* * VFI *(p,j)* * Cours de change *(j)*]**

***(p,j)* = Produits (Tomates, Courgettes, Oranges...) au jour j.**

769,3MDH (DUM)≠ **1240MDH** (VFI)

Concluding Comments

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Chokran
Thank you

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Questions for the Committee

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- 1.Does the Committee agree that additional guidance is needed to reinforce the importance of recording long-term contracts
- 2. Does the Committee agree to the incorporation of an analytical Box in BPM6/7 update and/or MSITS and ITMS with simple examples in the BPM7 Compilation Guide?
- 3. Does the Committee have any other views/suggestions on the issues discussed and proposed outcomes?