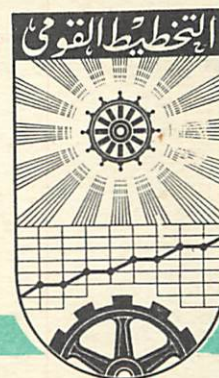


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### The Use of Commodity Balances in Foreign Trade Planning

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The Use of Commodity Balances in Foreign  
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### Foreword

This paper is the outcome of a Seminar discussions held by the International Economic Relations Center at the I.N.P., Cairo at which time Dr. Schulmeister from GDR was a visiting Expert at the Institute.

The introductory note and point 2.1 are written by Dr. Faika, points 2.2 and 2.3 by Dr. Schulmeister, while points 2.4 was written by Dr. Dohaia. Point 3.1 was written by Dr. Afr and point 3.2 by Dr. Schulmeister.

Dr. Faika was the responsible writer of writing Chapter II dealing with the use of commodity balances in foreign trade planning: Conclusions and Recommendations.

Dr. Schulmeister was the responsible writer of point 1 on Part II concerning the G.D.R. experience, while Dr. Faika was responsible for writing point 2 dealing with the A.R.E. experience.

The fruitful discussions among the group has greatly improved the contents of this paper. Directly or indirectly each of the writers has contributed to the outcome.

The writers would like to register their indebtedness to Dr. Alfonse Aziz, of the Ministry of Planning for his particular interest in attending the Seminar discussions and who made quite a lot comments which contributed to the improvement of this paper. Our thanks are also due to Mr. A. Nousseir, of the department of commodity balances in the Ministry of Planning, who attended two seminars and has made some valuable comments.



We hope that our suggestions in the paper would lay  
the ground and <sup>be</sup> valuable to the improvement of techniques applied  
to the foreign trade planning in general and to the work of the  
foreign trade department in the ministry of planning in particular.

PART I

Commodity Balances and Their Use in  
Foreign Trade Planning



PART I  
CHAPTER I

Nature of Commodity Balances and Its Use in Planning  
and Follow-Up

1 . Introductory Note

Drawing up a national plan is a comprehensive and often a complicated task which needs a lot of work not only in fixing the main targets of the development process but also in determining proportionality between all branches and sectors of the economy. In order to ensure optimality of the national economic plan, it is necessary that proportionality and consistency between all parts and spheres of the economy be ensured according to the plan.

Thus an important task of planning consists of determining both the resources and the uses of different products and factors of production either on commodity or on group basis. Planning thus includes determining these questions in quantitative forms as possible so that inter-product and inter-branch relationships can be drawn.

The balancing method is an important auxiliary instrument for fulfilling these tasks. It permits the planning authorities and the state enterprises to investigate the requirements of proportionality and consistency and to carry all these through in practice. There are different balances, drawing up of which have proved to be effective, e.g. input-output-balances, commodity balances, national economic balances like the state budget, the foreign exchange budget, etc..

In the following we will explain the nature and the construction of commodity balances and the problems connected with them. This will be done especially from the viewpoint of:

- ( a ) the use of commodity balances as a tool for planning.
- ( b ) the use of commodity balances as a tool for follow-up.



We should mention from the outset that such a tool is more useful for annual than for long-term planning.

## 2. Commodity Balances: Its Nature and Construction:

### 2.1 The nature of commodity balances:

In principal, commodity balance is nothing but a statement comprising all sources of supply (whether they are domestic or foreign) of a certain commodity (or group of commodities) and different uses of such commodity (s), whether they are also domestic or foreign. On the supply side, we have domestic production and imports. In addition, stocks at different economic units the summation of which may represent a significant part of total supply available would also be included. On the other hand, we have on the uses side both domestic and foreign demand as well as possible additions to stocks. Domestic demand may either be for intermediate purposes or for final use. For the latter, we usually differentiate between demand by the private sector and the government demand. As an example, the following table represents the final scheme of a commodity balance.

Final Scheme of a Commodity  
Balance

Period:

Name of the Commodity:

Unit of Measurement:

Resources	Uses
* Commencing Stock (Stock at the beginning of the year).	* Intermediate consumption (uses in production).
	* Final Consumption
	a. Private (individual)
	b. Governmental
* Domestic Production	* Investments
	a. Accumulation
	b. Reserves
* Imports	* Exports
* Other resources	* Carry-overs (stocks at end of period).
Total Resources	Total Uses



However, before elaborating the final table of a commodity balance, it is necessary to draw up certain working sheets for detailed estimation (or calculations) of the various items comprising the resources and the uses of a commodity balance. Usually, one must have two basic working sheets. One for calculating the items on the resources side, and the other for the items on the uses side.

The construction of the working sheets reveals the necessary information needed for the building up of the final commodity balance. Their use is important not only to reflect the fixed plan target for different ministries and organs, but also to ensure the consistency of data and information provided. In addition, it will be a basic source for finding out where to change if inconsistency may appear during the stage of planning or of the follow-up. Hence, the balancing method can be linked closely with the implementation of the plan and the follow-up system.

Commodity balances cannot be considered as isolated balances but as more or less closely linked to each other. By comparing different commodity balances we can come to a close relation between commodity balances and input-output-balances.

In practice, there are different groups of commodity balances:

- ( 1 ) the so-called "Material" balances which deal with balances for raw materials and intermediate goods, such as cotton, oil seeds, metals, chemicals, electric power.
- ( 2 ) the "consumer" balances which are drawn for consumption goods, whether agricultural or industrial, for sugar, bicycles, radios etc.
- ( 3 ) lastly, the "Equipment" balances which are drawn for capital goods, machinery, etc. and which are directly linked with investments in the period concerned.



As a rule, commodity balances are compiled according to a unified scheme, but there are some specifics in details and there will be some specific features in the estimation of the necessary data required for the working.

The period for which commodity balances are drawn may affect their construction. Long-term balances would be highly aggregated, while annual ones would be drawn in details. It should be mentioned that for perspective planning we should have balances for each year covering the plan period.

Building up commodity balances involves several distinct problems among which are the following main ones:

- ( 1 ) the determination of the "nomenclature" (list) of the commodity balances.
- ( 2 ) the choice of the unit of measurement (the valuation problem),
- ( 3 ) the problem of collecting the necessary data and the question of timing of the flow of such data (the information and the timing problems).



## 2.2 The nomenclature of commodity balances

At the beginning of drawing up commodity balances usually we have to answer the following questions:

- \* For which products or groups of products is it necessary to construct commodity balances?
- \* How to group these balances?

The first question has to be answered by fixing a concrete nomenclature (or list) for drawing up commodity balances whereas the second question is included in laying down the classification. A certain nomenclature will be prepared before classifying all commodity balances. Both aspects, the nomenclature and the classification of commodity balances must be considered as part of the whole system of classifications and methodological regulations applied for national planning.

The nomenclature of commodity balances will be different from country to country and from time to time. It mainly depends upon the aim and the role of commodity balances for planning and follow-up, upon the stage of development and the technique of planning. Past experience must be taken into consideration as well as the future development. Generally speaking, we may say that as there are commodities of major significance for the national reproduction process, i.e. important goods for realizing the country's investment policy, ensuring the current production, fulfilling the needs of the population in consumption goods, and those which are important for the export and import policies, then individual commodity balances should be drawn for these goods.

On the other hand it is sufficient sometimes to balance an aggregated number of commodities within one balance. Thus it is possible, e.g. to build up one balance for grains or different balances for wheat, barley etc. However, it is difficult to build up one balance for electrical machines, as they comprehend different commodities with



different uses from the economic and the technological point of view (such as refrigerators, air-conditioners, electrical equipments for engineering etc.), and as we balance the total it does not ensure balancing each kind by itself. We should remark here that constructing such aggregated commodity balance on a central level necessitates a balance for each commodity included on decentralized level.

It is natural that in the course of economic and technological progress the role of some commodities becomes different. As industrialization progresses, new products must be added, while other products might be neglected. Therefore, the nomenclature of commodity balances should change to reflect these developments.\*

Then on a certain stage of this development it may be preferable to build up a balancing Pyramid so that the central planning authority (Ministry of Planning) can concentrate its efforts on such commodities which are of major significance within the complex and comprehensive planning process, whereas other organizations and/or Ministries can elaborate commodity balances for less important goods.

Besides we will differentiate the nomenclature whether we are drawing up the annual plan or the perspective plan. The nomenclature of commodity balances is more detailed for annual planning than for perspective planning.

In correspondence with establishing the nomenclature usually we will group the commodities and fix a certain classification. There we follow classifications which are generally used in planning and follow-up and which should be consistent with national accounting.

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\* For example, there are 10,000 balances in USSR, about 4,000 in the G.D.R. and 170 in A.R.E.



### 2.3 The valuation of the items included

The items included in commodity balances can be valued on different bases the concrete one depends upon the aim of using this tool. A unified price or different prices might be used. Moreover, one can use physical units in constructing commodity balances for some products in the case of which the valuation problem will not arise. Each unit of measurement has its merits and demerits, and further explanations are necessary in order to give an idea, which one is the proper for which purpose.

As commodity balances aim in principle, at showing the consistency and equilibrium of total sources and uses for each commodity the use of physical units would be preferable.

But when doing so, one cannot compare different commodities such as textiles in meters and buses in units, or aggregate them up to get a balance at sectorial or national level. Also the same commodity cannot be followed-up over a longer period if quality improvements have been significant. At last, the consistency between the flow of the goods and the corresponding financial flows cannot be ensured. Therefore it is necessary to construct commodity balances on both physical as well as value bases.

In this regard, two questions should be clarified:

- ( 1 ) Have we to use the prices of a basic year and/or current prices?
- ( 2 ) Which prices should be taken as basis?

For drawing up plan-balances, both price bases should be used, the prices of a basic year in order to make obvious the quantitative changes, and current prices (planned prices for the coming period) for reflecting price changes. As long as we use both bases for planning it is preferable also to use both in follow-up.



With regard to the 2-nd question we bring the following example.

Commodity: Refrigerators

Unit of Measurement: 1.000 L.E.

Resources	On producer's price	On market price basis	Uses	on producer's price	on market price
1. Production	800	1.100	1. Intermediate consumption.	-	-
2. Import	100	150	2. Final consumption.	400	500
			3. Export	500	750
			4. Reserves	-	-
Total Resources	900	1.250	Total Uses	900	1.250

We can value the resources and the uses on both the producer's prices and the market prices and balance equation can be seen. The choice between these two basis depends upon the purpose and use of the commodity balance. Linking these items with the system of National Accounts and with other balances, too, such as the state budget, the foreign exchange budget etc would require using both bases.



## 2.4 The information and the timing problem

It can be seen from the concrete table and the working sheets which information are necessary. If there is a system of follow-up the commodity balances the problem of information is mainly concentrated on estimating necessary changes for the plan period on the basis of followed-up data. A remaining question would also be the proper timing of the flow of such information from their original sources to the body undertaking the planning process.

However in the lack of a concrete follow-up system, a big information problem will arise as we use commodity balances as a tool for planning. We should at least have a base year figures upon which our plan targets will be based. In what follows we will ~~briefly~~ explain sources of information of each of these items.

### Domestic Production:

Planned total national production, or total production of main commodities are set by different departments at the ministry of planning. Base year production figures could be obtained from the statistical organizations and different ministries.

### Imports:

Information about imports could be obtained from the ministry of economy and foreign trade and the foreign trade department at the ministry of planning.

Imports of intermediate goods and capital goods can be estimated according to the production targets of different commodities and technical coefficients showing the import contents of these commodities. Changes in techniques of production and domestic sources of supply especially of import substitutes should also be taken into consideration.