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The Use of International Buffer Stocks to Stabilise Commodity Export Revenue

by Herbert Oberhänsli, St. Gall*

The successful completion of negotiations on the Common Fund has not yet led to the hoped-for breakthrough for any of the commodity agreements belonging to the Integrated Programme for Commodities (IPC). Opposition, particularly by the industrialised countries, but also by individual producer countries, has left but little hope of a successful implementation of price stabilisation as part of an extensive programme. A principal reason for this is that in spite of detailed discussions on this matter by experts and politicians many incorrect assumptions still prevail and controversial opinions on many problems which could be solved empirically are still being discussed. One of these issues is whether price stabilisation would induce an increase or a decrease in fluctuation of the revenue of countries exporting raw materials.

In his assessment of the IPC, which is based on a theoretical model embellished with some empirical evidence, Baron concludes that price stabilisation by means of buffer stocks, as envisaged by the UNCTAD Secretariat, amounts to a mere treating of symptoms and is no appropriate way of overcoming fluctuations of export earnings¹. This is in sharp contrast to results obtained by Behrman and Tinakorn-Ramangkura in simulations of international buffer stocks functioning within highly differentiated primary commodity market models. These authors came to the conclusion that in all ten cases of the IPC's so-called "core commodities" price stabilisation had brought about a decrease in revenue fluctuation². In their analysis, the buffer stock interventions were able on average to reduce the revenue fluctuations from sales of various raw materials (within a fluctuation margin of $\pm 15\%$ of the median price level) by almost half. The best results were obtained by sisal and sugar, products for which the standard deviation in yearly revenue using price stabilisation was only about a fifth of the standard deviation without it. Their conclusion: "Contrary to the argument of Johnson and others, price stabilization generally is associated with revenue stabilization." Which version is correct?

In the course of the following article we will attempt to establish the reasons for the differing assessments of

the results of price stabilisation. Firstly, we will analyse the effect of international buffer stocks on total revenue fluctuation of the entire group of countries exporting a particular commodity, in our case cocoa. We will then in a second step establish the link between stable total revenue and the revenue fluctuation of individual exporting countries. Our conclusion will then compare price with revenue stabilisation. Price stabilisation proves to be merely a partial instrument for revenue compensation; it must be supported by revenue stabilisation. The advantages of buffer stock stabilisation, however, are such that revenue stabilisation would be left with only a subsidiary part to play.

Price Stabilisation and Market Revenue

The relationship between price intervention by an international buffer stock and the development of market revenue, i.e. the total revenue of the group of

¹ Cf. S. Baron: Preisstabilisierung als Instrument der Erlösstabilisierung – Eine modelltheoretische und empirische Kritik am „Integrierten Rohstoffprogramm“ (Price stabilisation as a means of stabilising revenue – An assessment of the "Integrated Programme for Commodities" based on theoretical model analysis and empirical evidence), in: Die Weltwirtschaft, Tübingen 1977, 1, p. 185.

² J. R. Behrman, P. Tinakorn-Ramangkura: Evaluating Integrated Schemes for Commodity Market Stabilisation, in: F. G. Adams, J. R. Behrman (eds.): *Econometric Modelling of World Commodity Policy*, Lexington/Mass. 1978, p. 161; the following quotation is taken from p. 171. For the composition of the ten so-called "core commodities" cf. Tab. 1.

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exporting countries, is primarily determined by three factors: the reasons behind price fluctuations, the price elasticities and the intervention margins of the buffer stock.

First of all it is essential to establish whether price movements are induced by fluctuation in supply or in demand. According to Baron, seven of the IPC's ten "core commodities" are subject to supply-induced fluctuation: this is "definitely" the case for cocoa and coffee and very probably so for sugar, cotton, jute, sisal and tin³. The other three commodities (tea, natural rubber and copper) experience fluctuations in demand. Baron's analysis, however, neglects the fact that his calculations can only go to indicate a relatively high share of supply-induced or demand-induced price fluctuations, not at the same time proving any kind of monocausality. In the case of coffee, for example, there is not only a price reaction to changes in output, but also an admittedly weaker yet clearly demonstrable reaction to the movements of the trade cycle⁴. Moreover, the parallelism of the price developments for several primary commodities during the boom years of 1972-1975⁵ would seem to imply that it is very unlikely that the seven "supply-induced" commodities are not likewise

affected by demand factors. Graphs such as Baron's⁶ which demonstrate the revenue-destabilising effects of price fluctuations induced exclusively by supply factors are thus out of touch with reality. On the other hand, the – according to Baron's graphs – perfect revenue stabilisation in the case of predominantly demand-induced price fluctuations must also be corrected for the effect of the influence exerted by competing supply fluctuations. Such corrections in the direction of mixed causes of price fluctuations present an initial explanation for the differences between Baron and Behrman/Tinakorn-Ramangkura. Since Baron presumes only supply fluctuations to be existent for seven of the ten commodities, the rectification of the difference would tend to move in the direction of Behrman's assessment.

Demand and supply elasticities form a second important nexus for an overall assessment. They are of no significance to the effects of the stabilisation of demand-induced price fluctuations, but are important in cases of supply-induced ones. In the latter instance, a growing demand inelasticity tends to lead to a stabilisation of total market revenue complementary to the stabilisation of prices. The limit to the stabilising

³ Cf. S. Baron, op. cit., p. 185 ff.

⁴ Cf. on this point G. Grober: Weltrohstoffmärkte im Zeichen der Flaute (A downturn on international commodity markets), in: WIRTSCHAFTSDIENST, No. 10, 1967, p. 524.

⁵ Cf. R. N. Cooper, R. Z. Lawrence: The 1972-75 Commodity Boom, in: Brookings Papers on Economic Activity, Washington D.C. 1975, No. 3, p. 671 ff.

⁶ Cf. S. Baron, op. cit., p. 178 ff.

Table 1

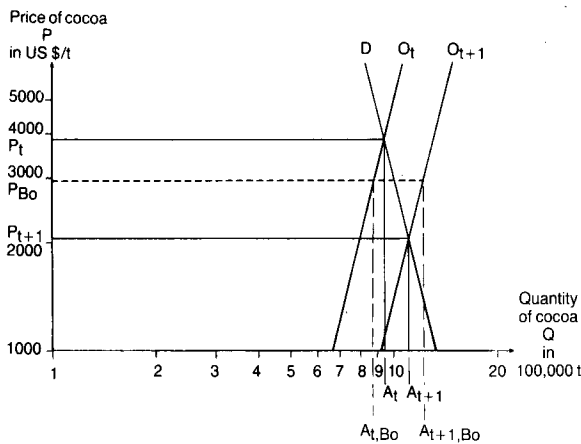
Price Elasticities of Demand and Supply for the Ten "Core Commodities"¹

	Baron ²		Behrman ³			Comparative values from various sources ⁴		
	Demand	Supply	Demand	Supply ⁵ long-term	short-term	Demand	Supply Developing countries	Industrialised countries
Cocoa	-0.18	0.26 (0) ⁶	-0.3	0.0	0.3	-0.33 (1.3)	0.34 (8.0)	
Coffee	-0.13	-	-0.2	0.0	0.3	-0.24 (1)	0.33 (8.4)	
Sugar	-0.03	0.59 (1)	-0.0	0.0	0.2	-0.03 (3.8)	0.19 (2.5)	0.15 (1.7)
Cotton	-0.06	0.03 (1)	-0.4	0.1	0.1	-0.44	0.07 (1)	1.34 (1)
Jute	-0.01	0.35 (1)	-0.0	0.2	0.2		0.07 (1)	
Sisal	-0.03	0.04 (0)	-0.0	0.1	0.2		2.4 (1)	
Tin	-0.11	0.32 (1)	-5.0	0.0	0.2		0.18 (3.5)	
Tea	-0.03	0.18 (1)	-0.1	0.1	0.2			
		0.03 (5) ⁸						
Natural rubber	-0.02	0.10 (4)	-0.5	0.0	0.4	-0.01 (1.2)		
Copper	-0.20	0.16 (0)	-0.4	0.0	0.1	-0.19 (2.1)	0.4 (4)	1.67 (4)
						-0.82 (4.8)		

¹ Calculated as a rule for the 1950-1974 period. ² S. Baron, op. cit., p. 187f (average elasticities). ³ J. R. Behrman: International Commodity Agreements, Washington D. C. 1977, p. 58. ⁴ Figures taken from the following: F. G. Adams: Implementation of Commodity Market Theory in Empirical Economic Models, in: F. G. Adams, J. R. Behrman (eds.), op. cit., p. 61f; and F. G. Adams, J. R. Behrman: Econometric Models of World Agricultural Commodity Markets, Cambridge Mass. 1976, p. 23f, 36f, 39 and 41. ⁵ Only supplies from developing countries. ⁶ The figures in brackets show the lag of the estimating function in years. ⁷ Inadequate information (cf. S. Baron, H. H. Glismann, B. Stecher: Internationale Rohstoffpolitik – Ziele, Mittel, Kosten (International Raw Materials Policies – Objectives, Means, Costs), Tübingen 1977, p. 157). ⁸ Of the two elasticities for tea, which according to the statistical quality indicators are equivalent, Baron takes the low figure for one analysis (thus decreasing the welfare gain of price stabilisation, cf. S. Baron, H. H. Glismann, B. Stecher, op. cit., p. 27), and the high figure for the other (thus making the effect of revenue stabilisation more uncertain, cf. S. Baron, op. cit., p. 187).

Figure 1

The Effects of Stabilising Cocoa Prices without a Fluctuation Margin between 1976 and 1977 (Supply Fluctuations) on Revenue Stability



Relationships:

$$\text{Supply } O_t = e^{a_t + \epsilon_o} \cdot P$$

$$O_{t+1} = e^{a_{t+1} + \epsilon_o} \cdot P$$

$$\text{Demand } D = e^{n + \epsilon_D} \cdot P$$

$$\text{Revenue } E = P \cdot A \text{ (Price x Quantity sold)}$$

Values:

Elasticity of Supply $\epsilon_o = 0.26$

Elasticity of Demand $\epsilon_D = 0.18$

Selling Price $P_{t+1} = 2,046 \text{ US\$}$

Quantity sold $A_t = 942,500 \text{ t}$

$A_{t+1} = 1,117,100 \text{ t}$

P_t, a_t, a_{t+1}, n were estimated according to the first three functions on the left hand side.

Results:

$E_t = \text{US\$}3,643 \text{ million}$ $E_{t,Bo} = 879,000 \text{ t} \times \text{US\$}2,956/\text{t} = \text{US\$}2,598 \text{ million}$

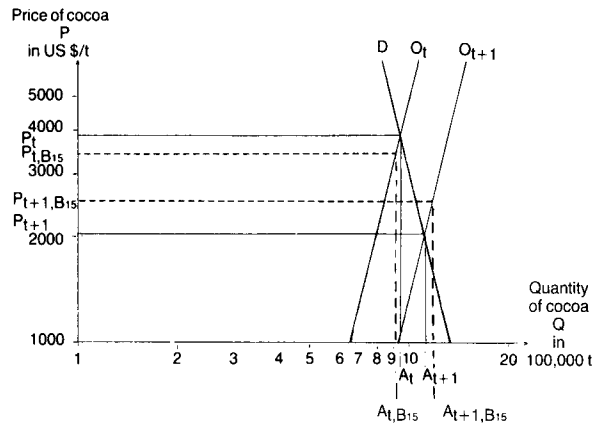
$E_{t+1} = \text{US\$}2,286 \text{ million}$ $E_{t+1,Bo} = 1,235,000 \text{ t} \times \text{US\$}2,956/\text{t} = \text{US\$}3,651 \text{ million}$

Coefficient of variation: 0.229

0.169

Figure 2

The Effects of a Stabilisation of Cocoa Prices within a Fluctuation Margin of $\pm 15\%$ of the Arithmetic Mean between 1976 and 1977 (supply fluctuations) on Revenue Stability



For relationships and basic values cf. Fig. 1

Results:

$E_t = \text{US\$}3,643 \text{ million}$ $E_{t, B15} = 911,000 \text{ t} \times \text{US\$}3,399/\text{t} = \text{US\$}3,096 \text{ million}$

$E_{t+1} = \text{US\$}2,286 \text{ million}$ $E_{t+1, B15} = 1,183,000 \text{ t} \times \text{US\$}2,512/\text{t} = \text{US\$}2,972 \text{ million}$

Coefficient of Variation: 0.229

0.020

effect is known: Hallwood states "that the price elasticity of demand must be more inelastic than -0.5 if price stabilization is also to stabilize revenue in a supply shift model"⁷. The elasticity calculations which form the basis for Behrman/Tinakorn-Ramangkura's analysis and Baron's assessment are shown in Table 1. Differing conclusions can be drawn: firstly, the generally limited reliability of elasticity estimates becomes apparent; secondly, it can be seen that the differing appraisals of the effects of price stabilisation on revenue stability expressed by Baron and Behrman/Tinakorn-Ramangkura are not due to differences in elasticity values. In almost all cases of primarily supply-induced price fluctuations (according to Baron this would apply to the first seven commodities in Table 1) the demand elasticities obtained by Behrman and Tinakorn-Ramangkura are above those obtained by Baron, in the case of tin way above the latter's result. Thirdly, if Hallwood's statement on the marginal value of -0.5 is

taken into consideration, one must come to the conclusion that Baron has quite simply misinterpreted his elasticity estimates. Let us confirm this by taking cocoa as an example, the commodity which, according to Baron, both fluctuates on the supply side and registers the highest demand elasticity (Fig. 1). The extreme drop in sales between 1976 and 1977 from 1,117,100 t to 942,500 t would, in accordance with the elasticities registered here of -0.18 and 0.26 respectively, have induced a price increase from 2,046 US \$/t to 3,865 US \$/t⁸. Were an international buffer stock to intervene until the mean price of 2,956 US \$/t cocoa is reached, the market revenue's coefficient of variation would decrease from 0.230 to 0.168 in the period from 1976 to 1977; fluctuations would thus decrease by 27 %. Using the improbable variant of pure supply fluctuations the only critical case in Baron's list of elasticities thus reveals a comparatively extensive compensatory effect on the total revenue of the exporting countries.

Up to now we have always proceeded from the assumption that the price is stabilised at exactly the arithmetic mean of the various periods. This assumption must be modified since the buffer stock agreements

⁷ P. Hallwood: Stabilization of International Commodity Markets, Greenwich Conn. 1979, p. 59.

⁸ The basic data have been taken from IBRD: Commodity Trade and Price Trends (1979 Edition), Washington D.C., Aug. 1979, pp. 19 and 36. The actual price for 1977 was 3,790 US \$/t, the elasticities thus supplying quite a good model for the selected period 1976-77.

usually envisage stabilisation within a given margin below and above the mean. In the extreme case of the 1977 sugar agreement this margin was $\pm 31\frac{1}{4}$ %. As demonstrated in the talks on the copper and cotton agreements optimal workability would be achieved at a level of $\pm 14-15$ %; in the 1980 cocoa agreement, which has not as yet been ratified, a margin of ± 15.4 % is envisaged. Assuming a ± 15 % margin for buffer stock interventions, an examination of the stabilisation effect on revenue reveals a surprising result for supply fluctuations (Fig. 2). The compensatory effect on revenue is not decreased in comparison with "strict" price stabilisation, indeed taking the same example as in Fig. 1, i. e. cocoa, the fluctuations in market revenue can be reduced not just by 27 % but by 91 %, leaving a coefficient of variation of 0.020.

If we continue this line of calculation for our coffee example (1976/1977), employing differing fluctuation

margins, we arrive at the relationship shown in Fig. 3. An optimum becomes visible at a simulated price fluctuation margin of ± 13 %, a level at which revenue fluctuations disappear completely. In no one area of the figure do buffer stock interventions have a destabilising effect.

Revenues of Individual Exporting Countries

A successful stabilisation of total market revenue does not necessarily mean a lessening of fluctuations in the revenue of individual exporting countries. Even in the case of individual commodities the development of sales by the various countries is by no means synchronous to the development of the total revenue of the product's market as a whole. Again referring to the example of cocoa, Table 2 reveals considerable fluctuations of the shares of world exports of the individual exporting countries. Although this is partly

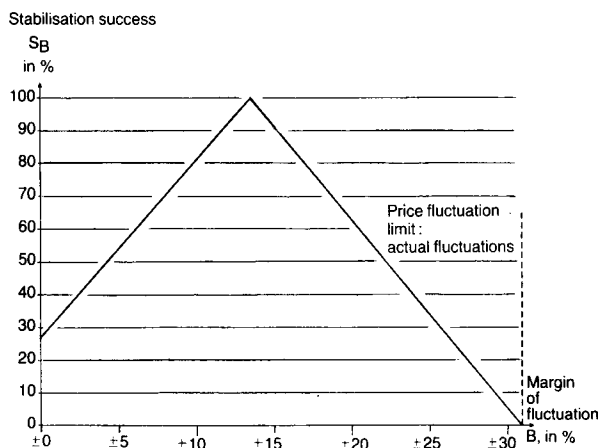
Table 2
The Effect of Stable Total Market Revenue on the Instability of Cocoa Revenue of the Fifteen Most Important Exporting Countries¹

Countries	Period	Average cocoa export revenue in 1,000 US \$ per annum	Coefficients of fluctuation ²		Changes in revenue fluctuations with complete stabilisation of total market revenue
			for cocoa export revenue	for shares of total market revenue	
Ghana	1960-69	185,201	6.3	6.5	+ 3.2
	1970-79	449,679	17.6	6.7	- 61.9
Nigeria	1960-69	113,764	11.4	9.6	- 15.8
	1970-79	304,924	18.2	11.0	- 39.6
Ivory Coast	1960-69	55,248	10.4	8.8	- 15.4
	1970-79	285,123	18.2	8.1	- 55.5
Brazil	1960-69	49,835	35.0	29.4	- 16.0
	1970-79	231,232	22.9	9.8	- 57.2
Cameroon	1960-69	36,173	13.5	7.3	- 45.9
	1970-79	111,486	14.3	12.0	- 16.1
Ecuador	1960-69	21,192	17.2	13.4	- 22.1
	1970-79	42,675	32.8	24.5	- 25.3
Dominican Republic	1960-69	11,101	25.9	20.9	- 19.3
	1970-79	41,240	25.6	16.5	- 35.5
Papua New Guinea	1960-69	4,676	14.2	11.2	- 21.1
	1970-79	45,856	24.5	13.5	- 44.9
Togo	1960-69	7,529	14.5	7.7	- 46.9
	1970-79	28,763	29.9	17.0	- 43.1
Venezuela	1960-69	8,049	9.3	11.9	+ 28.0
	1970-79	15,941	25.1	19.4	- 22.7
Sao Tomé-Pr.	1960-69	4,815	19.3	13.2	- 31.6
	1970-79	11,129	20.5	18.9	- 7.8
Sierra Leone	1960-69	2,008	20.2	16.7	- 17.3
	1970-79	11,391	11.6	11.6	- 0.3
Costa Rica	1960-69	4,165	24.2	17.0	- 39.8
	1970-79	6,919	26.2	21.4	- 18.3
Mexico	1960-69	3,435	37.1	44.7	+ 20.5
	1970-79	7,682	44.6	52.3	+ 17.3
Trinidad and Tobago	1960-69	3,657	18.7	16.6	- 11.2
	1970-79	5,776	25.5	16.9	- 33.7
Total and Averages 15 countries	1960-69	510,848			- 11.3
	1970-79	1,599,816			- 48.3

¹Source for basic data: FAO, Trade Year Book, Rome, various volumes. ²IBRD/IMF coefficient of fluctuation, calculated as an average of the percentage deviations of the yearly values from the estimated trend of the logarithmic values.

Figure 3

The Stabilisation Success of a Price Stabilisation System on Total Revenue Ensuing from Cocoa Exports for the Period 1976-1977 Depending on the Fluctuation Margin for Intervention Prices



Relationships :

$$\text{Stabilisation success } S_B = \frac{\left| 1 - \frac{2 E_{t,B}}{E_{t,B} + E_{t+1,B}} \right|}{\left| 1 - \frac{2 E_t}{E_t + E_{t+1}} \right|}$$

in which Revenue $E = P \times A$ (Price x Quantity sold)

due to (natural) factors peculiar to each country, it is to a large extent also a result of the varying elasticities of supply. There are differences in the pattern of production. However, as Avramović has shown, the differing elasticities are primarily a result of differing reactions to heavily falling prices, depending on the economic strength of the exporting countries. When prices fall the weaker countries are forced to further increase their supply in order to secure at least a minimum of foreign exchange earnings⁹.

The fluctuations in market shares mean that stable total market revenue only partly leads to a stabilisation of the individual countries' export revenue for cocoa. In one of the cases under review (Mexico) stable total market revenue would have created an increase in revenue fluctuation in both decades, in two cases (Ghana and Venezuela) in one decade. This, however, is only the case if price stabilisation does not affect the movement of market shares. This is very improbable since stabilised prices contribute to making it unnecessary to increase sales to cover falling prices. In Ghana's case, for example, the sixties would

undoubtedly have seen less fluctuation in market share had there been stable prices. This assertion is corroborated by the slight revenue fluctuations shown in Table 2 and by the facts presented by Avramović concerning Ghana's reduced market staying power¹⁰. According to Avramović the average reduction in revenue fluctuation of individual countries' cocoa exports would, providing total market revenue is stable, have amounted to *at least* 11.3 % in the sixties and *at least* 48.3 % in the seventies.

Conclusions

An international buffer stock can only provide very limited stabilisation of export earnings for primary commodity exporting countries. One of the reasons for this is the price margin, which leaves high residual fluctuations in total market revenue in cases of demand fluctuation and which cannot be solely geared to the requirements of revenue stabilisation in cases of supply fluctuation. Another reason is to be found in problems related to determining the mean price for intervention, which will only rarely assume the optimal level shown in Figs. 1 and 2.

This is why the average stabilisation success for total market revenue is, according to Behrman and Tinakorn-Ramangkura, at a level of only barely 50 %. Referring back to individual countries and generalising the figures for cocoa, the revenue compensation through buffer stocks for fluctuations such as those during the sixties would perhaps amount to 5 %, for the more considerable fluctuations during the seventies to approximately 20-25 % of the actual commodity revenue fluctuations. These two figures should be compared with existing revenue compensation schemes. A simulation in accordance with the new Stabex and Sysmin regulations in Lomé II and using export values from 1973-1977 for the three countries Benin, Sudan and Zambia (Sysmin) revealed an average reduction in fluctuations of only 4.5 %; a simulation for the same countries and covering the same period using the five-year geometric mean (two forecast values) applied by the IMF for compensatory financing showed an 11.3 % reduction of revenue fluctuations¹¹.

In spite of the comparatively good results achieved by buffer stocks in stabilising export earnings they cannot replace the second instrument, i.e. direct revenue

⁹ Cf. on this point examples in the cocoa sector in: D. Avramović : Common Fund. Why and of What Kind, in: Journal of World Trade Law, Twickenham, Middlesex, Dec. 1978, 5, p. 402.

¹⁰ Cf. D. Avramović, op. cit., p. 402.

¹¹ Cf. H. Oberhänsli: Internationale Rohstoffpolitik im Zeichen von Instabilität und Inflation (International Commodity Policies in a Period of Instability and Inflation), St. Gall 1982, pp. 335 and 339.

compensation. As already demonstrated, residual fluctuations in revenue remain even with stabilised commodities. Apart from this many commodities from Third World countries are unsuitable for international buffer stocks: they are either perishable, e. g. bananas, or too bulky, e.g. bauxite. Alongside the primary commodity exports themselves, the more heterogeneous second and third processing stages of raw materials from developing countries are still subject to considerable fluctuation, and earnings from tourism, too, are affected by fluctuations due to weather and fashion. An extensive earnings stabilisation scheme thus cannot be regarded as a replaceable alternative, but as a valuable supplementation of price stabilisation. Revenue compensation must never, however, assume more than a subsidiary role, for price stabilisation has a number of important advantages for both exporters and importers of primary commodities and for the sponsors of the stabilisation schemes.

We do not wish at this stage to elaborate upon the many benefits of price stabilisation (consumer's and producer's surplus, increased efficiency due to a decreased risk, etc.¹²). We would, however, like to mention a few of the particular advantages presented by a system of price stabilisation in the context of revenue stabilisation. One definite advantage is the fact that, as opposed to the most common forms of intervention and also to those revenue stabilisation schemes still justifiable with regard to the outlays involved, the effect of price interventions on revenue not only affects the countries' foreign exchange earnings without delay but also at the same time affects the earnings of individual producers in the Third World¹³.

From the point of view of the sponsors, among which in both cases (price and revenue stabilisation) the industrialised countries play a major part, the following four points are important:

1. Price stabilisation via international buffer stocks reduces the overall budgetary expenditure necessary for an effective revenue compensation. As shown in Table 2, the revenue instability of individual commodity exporting countries consists of two components: on the one hand we find the self-compensatory fluctuations in the *shares* of total market revenue, on the other hand the fluctuating total market revenue itself. In every revenue compensation system which is intended as a

self-supporting instrument, the main problem is the securing of funds and their subsequent appropriation for the "open side" (open towards the consumer countries), i.e. for the compensation for any losses in total market revenue. Providing the total market revenue remains stable, the fluctuations of the individual shares of this revenue will, in accordance with symmetrical compensation and repayment mechanisms, create a continual equilibrium between the payments and repayments of the compensatory system.

A much lower budgetary expenditure is required to cover this "open side" using price stabilisation, both during fluctuations in demand and in supply. In Fig. 2, for instance, the amount needed for intervention during the period of low prices is US \$ 269 million; a revenue stabilisation intended to induce an equivalent reduction in the fluctuations of total market revenue (coefficient of variation = 0.020) would have had to render credits amounting to US \$ 619 million. A large part of the financing of the "open side" carried out under the price stabilisation system is implemented by "windfall profits", fixed in the course of price fluctuations from the purchaser to the seller and back again.

2. For the "credits" passed on via prices the industrialised countries have in the buffer stocks security in their hands. Worth mentioning is the fact that this should also reduce interest costs for invested funds. The thus diminished average capital costs will compensate for a large part of the additional burden of stock-piling costs which do not emerge in the case of pure revenue compensation systems.

3. The $\pm 15\%$ margin of intervention indirectly guarantees that market-related interest will be included in the calculation of financing the "open side"¹⁴.

4. There is a genuine automatism governing the "repayment" of revenue compensation via prices without pressure having to be exerted on the "debtors"¹⁵.

These reflections allow us to conclude that it would serve the interests of both the primary commodity exporting countries and the industrialised countries if, wherever practicable, preference were to be given to international buffer stocks whilst revenue stabilisation systems should assume merely a supporting role.

¹² Cf. for example H. Oberhänsli, op. cit., p. 214 ff.

¹³ As regards the positive effects of this situation on structural stability in developing countries cf. F. G. Adams, J. R. Behrman, R. Roland: Measuring the Impact of Primary Commodity Fluctuations on Economic Development, in: American Economic Review, Menasha, Wisc., 1979, No. 2, p. 164 ff.

¹⁴ Cf. K. N. Bhaskar, C. L. Gilbert, R. A. Perlman: Stabilization of the International Copper Market. A Simulation Study, in: Resources Policy, Guildford, Surrey, No. 1, 1978, p. 23.

¹⁵ On the significance of a symmetrical automatism cf. H. Mayrzedt, M. Ernst, H. Oberhänsli: Perspektiven der Weiterentwicklung des Nord-Süd-Dialogs (Prospects for an Intensification of the North-South Dialogue), Munich 1981, p. 91 f.