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(832)

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by

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EFFECTIVE PROTECTION OF THE EAST AFRICAN TRANSFER TAXES

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Effective protection of the East African Transfer Taxes

Peter A. Diamond

In the attempt to encourage economic cooperation and integration as well as to foster more rapid economic growth of the less industrialized parts of East Africa, the Treaty for East African Cooperation introduced transfer taxes. These are tariffs on intercountry trade within East Africa which are levied at lower rates than the external tariff. While it would no doubt be interesting to examine the full impact of the Treaty, this paper examines a much more tractable problem - the level of effective protection afforded by the transfer tax structure. That is, formulas are developed, for various levels of tariff rates and import contents, to show how much higher costs of production can be in Kenya, say, than in the rest of the world and still permit a Kenyan firm ot compete in the Tanzanian or Ugandan market.[1] Similarly it is calculated how much higher costs in Tanzania can be than those in Kenya, Uganda, or abroad and still permit the Tanzanian firm to compete. The intention of the Treaty appears to be to afford some protection for Kenya in the Tanzanian and Ugandan markets (and Uganda in the Tanzanian market) relative to foreign firms while also giving the home country, Tanzania or Uganda some protection relative to the more industrialised East African partners.

The transfer tax, however is levied on the value of the commodity at the border of the taxing country, less any duty that has been paid on imported inputs. The imported inputs themselves, however are subject to transfer tax as well as having been subject to tariff duty on entering East Africa. This aspect of the transfer tax implies that for some values of tax rates and import contents, Kenyan and Ugandan firms are at a disadvantage in the Tanzanian market relative to firms outside East Africa. Thus, the apparent intent of the Treaty is not met due to the complications of effective tariff protection.

After a presentation of the relevant parts of the Treaty, effective protection is analysed, first for wholly East African goods and than for goods with an import content. This analysis is done in a static setting which is briefly commented on in the concluding two sections of the paper.

Treaty for East African Cooperation

A transfer tax is a tariff imposed on trade between countries in the East African Community. The Treaty provides that a country which is in deficit in its balance of trade in manufactured goods[2] with the remainder of East Africa may levy transfer taxes on manufactured imports.[3] Thus, in the present circumstances Tanzania and Uganda, but not Kenya may levy transfer taxes. The levying of these taxes is further restricted in that the value of imports from one country to another subject to taxation cannot exceed the trade deficit (in manufactured goods) between these two countries. Thus, Uganda can levy taxes against Kenyan but not Tanzanian goods. The ad valorem rate of tax is chosen by the importing country subject to a maximum of one-half the ad valorem rate of customs duty on importation of the same good from outside East Africa. The base on which the tax is levied is defined as the value of the import at the border of the taxing country less any duty that has been paid on imported inputs into production.[4] The list of manufactured goods which can be taxed is further restricted by two conditions on manufacture of the good in the taxing country. First, production of the good in the taxing country must be at least 15% of home consumption or worth at least two million shillings.[5] Second, the taxing country cannot export more than 30% of its production of this commodity to the other countries of East Africa. Any commodity can be subject to transfer tax in one country for no more than eight years.[6]

Wholly East African Good

Let us consider a commodity which is simultaneously being imported into East Africa and being produced both by a country which can levy transfer taxes and by a country whose produce is subject to transfer tax. For ease of reference, let us consider the Tanzanian market in which a homogeneous good of Tanzanian, Kenyan, and foreign manufacture is simultaneously for sale. Let us further assume that the good contains no imported components when it is produced in East Africa. Comparing a Tanzanian firm to a foreign firm we shall ask how much higher the costs of production can be in Tanzania than in the rest of the world (including transport to Tanzania) and still permit the Tanzanian firm to break even. The ratio of Tanzanian costs to foreign costs will be called the Tanzanian break-even cost ratio. This ratio minus one would be the

effective protection.[7]) Let us note that this does not directly tell us how much Tanzanian production will be induced by the tariff which permits higher costs. That depends on a variety of factors including the actual costs of production in Tanzania and the elasticity of supply of the inputs into production. It is simply an indication of the level of inducement as well as a measure of the increased cost to consumers from having Tanzanian production. Similarly we can compare Kenyan production costs (including transport to Tanzania) with foreign production costs. We will call this ratio the Kenyan break-even ratio. (Note that this reflects Kenyan production for the Tanzanian market. Analysis of Kenyan production for the Kenyan market parallels that of Tanzanian production for the Tanzanian market.) Thirdly we can take the ratio of Tanzanian break-even cost to Kenyan break-even cost to obtain an indication of the protection given Tanzanian firms relative to Kenyan firms.

Since we are considering a homogeneous commodity, the price at which the good can be sold in Tanzania is the same for the produce of the three different origins. Since the Tanzanian firm pays no taxes or tariffs[8] while the foreign firm faces a tariff, the comparison of these two costs is straightforward. Let us denote by p the price of the foreign produced good at the Tanzanian border. Let us denote by t the ad valorem tariff rate on foreign manufactures. Then the equilibrium price for this commodity in Tanzania is $p(1+t)$. Thus the Tanzanian firm can just break even if its costs q_T just equal the equilibrium price. Taking the ratio of Tanzanian costs to the foreign price at the Tanzanian border, we have the Tanzanian break-even cost ratio

$$(1) \qquad \frac{q_T}{p} = 1 + t$$

Now let us consider a Kenyan firm producing for the Tanzanian market at a cost q_K. The Kenyan firm is subject to a transfer tax[9] at the ad valorem rate $\frac{1}{2}t$. Thus the Kenyan firm can just break even if its costs of production plus transfer tax payments equal the equilibrium price in Tanzania,

p(1+t). From this equality we can calculate the Kenyan break even cost ratio

$$(2)\quad \frac{q_K}{p} = \frac{1+t}{1+\frac{1}{2}t}$$

Taking the ratio of Tanzanian to Kenyan break-even costs we obtain an indication of Tanzanian protection relative to Kenya.

$$(3)\quad \frac{q_T}{q_K} = 1+\tfrac{1}{2}t$$

Table 1 contains examples of these three cost ratios calculated for ad valorem duty rates of 30%, 50%, and 100%.

Imported Inputs

Now let us consider a good with import content, for example radios which are assembled in East Africa from imported parts, or clothing which is made from imported cloth. Let us denote by p_1 the price of the final good (manufactured abroad) at the Tanzanian border. Let us denote by p_2 the price of the imported inputs at the Tanzanian border. If Tanzania imports the final good rather than the intermediate good, the cost difference is p_1-p_2. From the point of view of Tanzania this difference represents the cost of production for completing the manufacture of the good, if production takes place abroad. In terms of protecting a Tanzanian firm, we are interested in the cost of production which takes place in Tanzania. Thus we wish to compare the costs of the production which is done in Tanzania to the world costs defined above. We are interested thus in the total costs of a Tanzanian firm less the cost (including duty) of the input. Let us denote by t the ad valorem duty rate on the final good. Le us denote by at the ad valorem duty rate on the intermediate good. Thus a is the ratio of intermediate good duty rate to final good duty rate.

In equilibrium the Tanzanian firm sells its output at the price $p_1(1+t)$ while it must pay $p_2(1+at)$ for its imported input. Thus a Tanzanian firm can just break even if its costs of production in Tanzania equal the

TABLE 1

BREAK-EVEN COST RATIOS, WHOLLY EAST AFRICAN GOOD

Tariff Rate	30%	50%	100%
Tanzanian break-even cost ratio	1.30	1.50	2.00
Kenyan break-even cost ratio	1.13	1.20	1.33
Tanzanian ratio relative to Kenya	1.15	1.25	1.50

difference in these two equilibrium prices

$$(4) \quad q_T = p_1(1+t) - p_2(1+at).$$

Dividing q_T in equation (4) by p_1-p_2 we obtain the break even cost ratio for a Tanzanian firm. Let us define b ($=p_2/p_1$) to be the import content of the good, evaluated at world prices. Then, replacing p_2 by bp_1 we can express the break-even cost ratio as

$$(5) \quad \frac{q_T}{p_1(1-b)} = \frac{1 + t - b(1 + at)}{1 - b}.$$

Recalling that we defined effective protection as the break even cost ratio minus one, we can define nominal protection as the ad valorem duty rate on the final good. In the case of a wholly East African good nominal protection and effective protection are the same as can be seen from Table 1 or from equation (5) when b is set equal to zero. However in the case of a good with import content effective protection exceeds nominal protection if the final good tariff rate exceeds the intermediate good tariff rate: that is if a is less than one. The converse holds when a exceeds one. When a is less than one, the larger the import content the larger the level of effective protection for any given final good duty rate. In Table 2 are given several examples of Tanzanian effective protection for different combinations of the parameters a, b, and t.

Kenyan Production

In analyzing Kenyan production for the Tanzanian market we want to follow the same procedure as above and examine the costs of production which occur in Kenya. We shall assume that the imported input costs the same whether imported into Kenya or Tanzania. The Kenyan firm, in addition to its costs of production in Kenya must pay duty on the input and transfer tax on the value of its product at the Tanzanian border less the duty that has already been paid. Let us denote by r the value of Kenyan manufacture at the Tanzanian border. In equilibrium, the value at the border plus the transfer tax will equal the price inside Tanzania.

TABLE 2

TANZANIAN BREAK-EVEN COST RATIO RELATIVE TO REST OF WORLD

Final Good Tariff Rate:

	30%				50%				100%			
Import Content	0	30%	50%	70%	0	30%	50%	70%	0	30%	50%	70%
Input Tariff												
Final Good Tariff												
0	1.30	1.43	1.60	2.00	1.50	1.71	2.00	2.67	2.00	2.43	3.00	4.33
.5	1.30	1.36	1.45	1.65	1.50	1.61	1.75	2.08	2.00	2.21	2.50	3.17
1.0	1.30	1.30	1.30	1.30	1.50	1.50	1.50	1.50	2.00	2.00	2.00	2.00
1.5	1.30	1.24	1.15	.95	1.50	1.39	1.25	.92	2.00	1.79	1.50	.83

$$(6) \quad r + \tfrac{1}{2}t(r - atp_2) = p_1(1 + t).$$

For the Kenyan firm to just break even, its costs of production plus the cost (including duty) of the input must equal the value of the Kenyan good at the Tanzanian border,

$$(7) \quad q_K + p_2(1+at) = r.$$

We can now substitute from equation (7) into equation (6) and eliminate r from the expression,

$$(8) \quad q_K(1+\tfrac{1}{2}t) + p_2(1+at)(1+\tfrac{1}{2}t) - \tfrac{1}{2}tatp_2 = p_1(1+t).$$

This expression can now be altered by multiplying through the parentheses and substituting bp_1 for p_2,

$$(9) \quad q_K(1+\tfrac{1}{2}t) + bp_1(1 + at + \tfrac{1}{2}t) = p_1(1+t).$$

We can now express the Kenyan break-even cost ratio by solving equation (9) for q_K and then dividing by foreign costs of completing production, $p_1(1-b)$.

$$(10) \quad \frac{q_K}{p_1(1-b)} = \frac{1 + t - b\ (1+at+\tfrac{1}{2}t)}{(1+\tfrac{1}{2}t)(1-b)}$$

Let us note for future reference that if the transfer tax is levied at less than the full legal rate we need only replace the $\frac{1}{2}$ in equation (10) by the appropriate fraction to obtain the break even cost ratio. Examples of this ratio are given in Table 3.

As was noted in the introduction, because the import content is subject to both tariff and transfer tax it can occur that the Kenyan firm is at a disadvantage relative to foreign firms in producing for the Tanzanian market. To determine the combinations of duty rates and import contents for which this is true, let us begin by considering the border line case where the break even cost ratio is just one, that is Kenyan and foreign firms are on exactly the same footing in the Tanzanian market. Equating the right hand expression in equation (10) to one, cross multiplying and clearing

TABLE 3

KENYAN BREAK-EVEN COST RATIO
RELATIVE TO REST OF WORLD.

Final Good Tariff Rate:

	30%				50%				100%			
Import Content	0	30%	50%	70%	0%	30%	50%	70%	0%	30%	50%	70%
Input Tariff												
Final Good Tariff												
0	1.13	1.19	1.26	1.43	1.20	1.29	1.40	1.67	1.33	1.48	1.67	2.11
.5	1.13	1.13	1.13	1.13	1.20	1.20	1.20	1.20	1.33	1.33	1.33	1.33
1.0	1.13	1.07	1.00	.83	1.20	1.11	1.00	.73	1.33	1.19	1.00	.56
1.5	1.13	1.02	.87	.52	1.20	1.03	.80	.27	1.33	1.05	.67	*negative

* The Kenyan firm cannot produce for the Tanzanian market with zero costs.

parentheses we have the equation

$$(11)\quad 1 + t - b - abt - \tfrac{1}{2}bt = 1 + \tfrac{1}{2}t - b - \tfrac{1}{2}bt.$$

Simplifying this expression we see that the Kenyan break even cost ratio is one whenever

$$(12)\quad ab = \tfrac{1}{2},$$

or whenever the product of import content times the ratio of intermediate to final tariffs is one-half. Whenever this product exceeds one-half; the Kenyan firm is at a disadvantage.[12] For example, with an import content of one-half and the same duty rates on input and final good the Kenyan firm has no advantage. Diagram one shows the combinations of these variables which result in the Kenyan firm being at a disadvantage.

Tanzanian Protection Relative to Kenya

We have calculated expressions for the protection given Tanzanian and Kenyan firms relative to foreign firms. To calculate the ratio by which Tanzanian costs can exceed Kenyan costs, with both firms breaking even we need only take the ratio of the two expressions calculated above in equations (5) and (10).

$$(13)\quad \frac{q_T}{q_K} = \frac{1 + t - b(1 + at)}{1 + t - b\,(1 + at + \tfrac{1}{2}t)}\quad (1 + \tfrac{1}{2}t)\ .$$

From this expression, we can see that the presence of import content ($b>0$) increases the effective protection given Tanzanian firms relative to those of Kenya. In Table 4 are tabulated some examples of this cost ratio. Comparing effective protection to nominal protection (equal to $\frac{1}{2}t$) we see that effective protection always exceeds nominal protection when there is a positive import content. We can see this directly by considering the transfer tax as made up of two parts, a tax on Kenyan value-added and a tax on the import content of Kenyan manufactures. (Since both Kenyan and Tanzanian firms pay the same duty on the input, this need not be considered directly.) From the tax on Kenyan value-added the Tanzanian firm receives effective protection which equals nominal protection. Since the Kenyan firm must also pay transfer tax on the

For goods in the shaded area Kenyan firms are at a disadvantage relative to those outside East Africa.

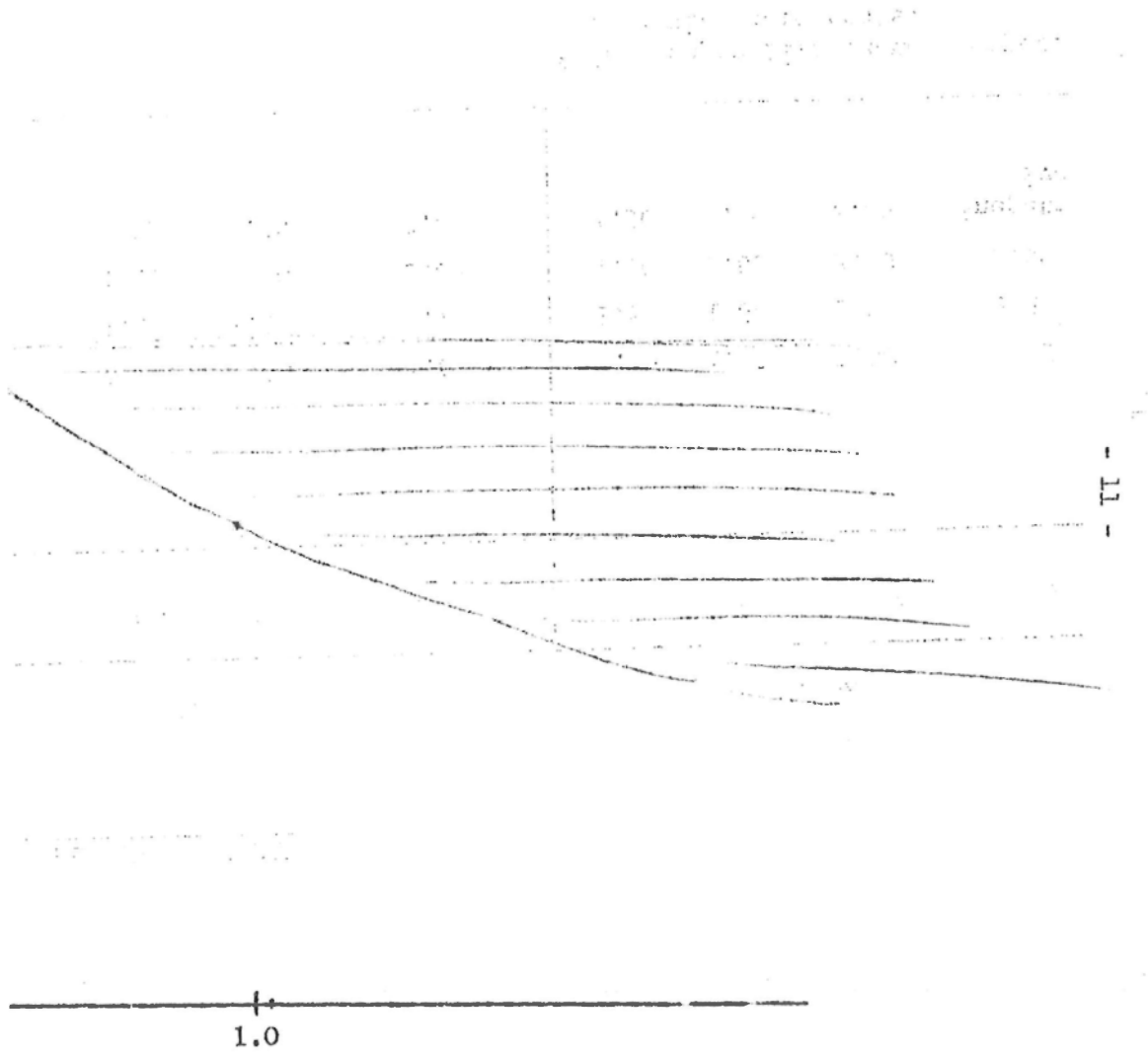


DIAGRAM-1

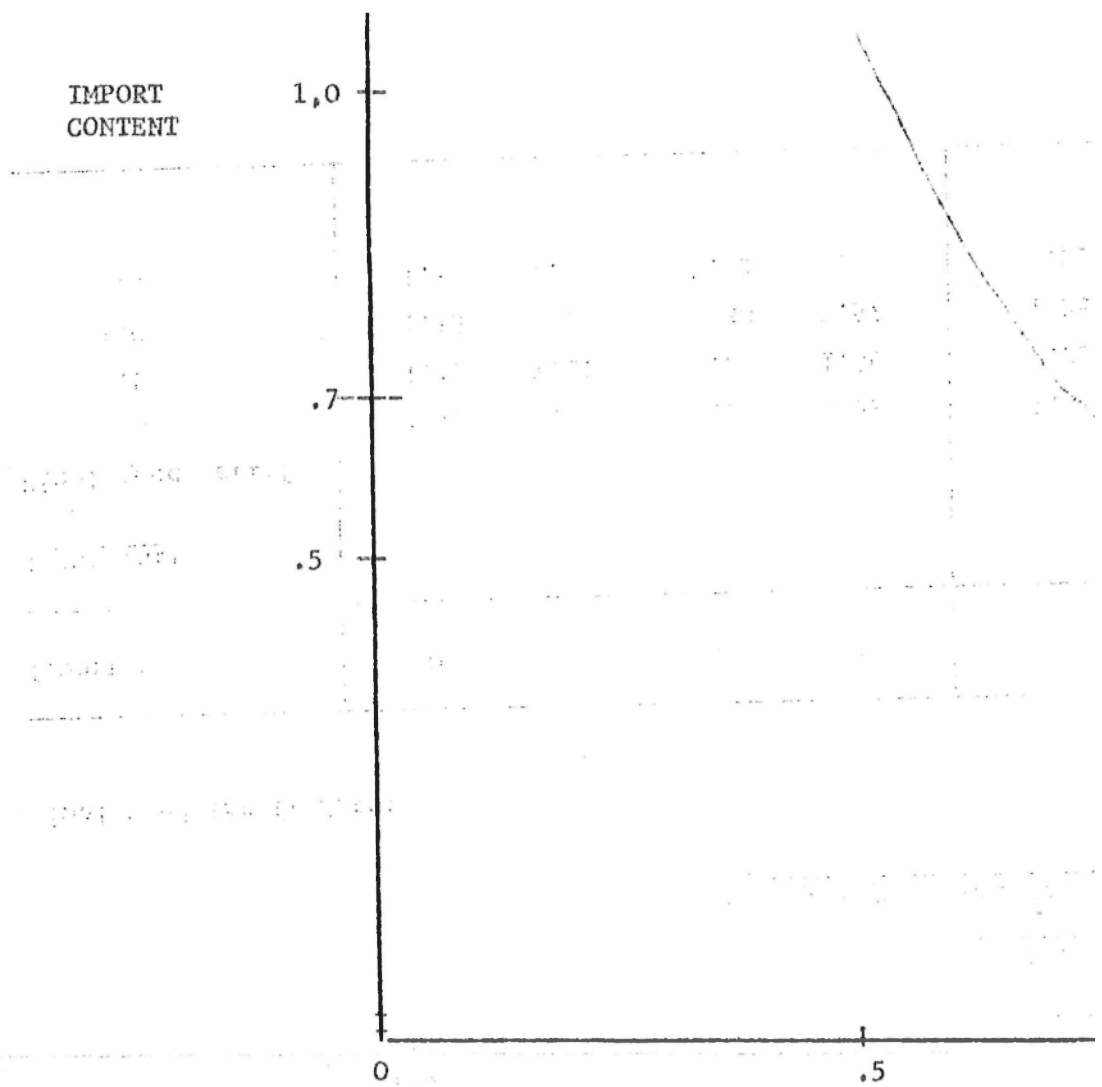


TABLE 4

TANZANIAN BREAK-EVEN COST RATIO RELATIVE TO KENYA

Final Good Tariff Rate:

	30%				50%				100%			
Import Content	0	30%	50%	70%	0	30%	50%	70%	0	30%	50%	70%
Input tariff												
Final good tariff												
0	1.15	1.20	1.27	1.39	1.25	1.33	1.43	1.60	1.50	1.65	1.80	2.05
.5	1.15	1.21	1.28	1.46	1.25	1.34	1.46	1.74	1.50	1.66	1.88	2.38
1.0	1.15	1.21	1.30	1.57	1.25	1.35	1.50	2.05	1.50	1.68	2.00	3.60
1.5	1.15	1.21	1.32	1.82	1.25	1.35	1.56	3.44	1.50	1.70	2.25	*negative

* The Kenyan firm cannot compete even with zero costs.

import content effective protection exceeds nominal protection being larger the larger the import content.

This suggests that if it is desired to give effective protection equal to nominal protection the tax could be levied just on Kenyan value-added. Since Kenyan firms already need to declare the duty paid on imported inputs (since this is not subject to transfer tax) it would not be too great an administrative change to also deduct the cost of imports from the tax base. Alternatively the same goal could be achieved, that is effective protection equal to $\frac{1}{2}t$, without altering the Treaty by having Tanzania levy the transfer tax at less than the full legal rate. We can obtain an exact formula for the ratio of transfer tax to final tariff which will accomplish this by equating the break even cost ratio to $1+\frac{1}{2}t$. Let us denote by c the ratio of transfer tax to final tariff. Then the expression for the cost ratio is obtained by substituting c for $\frac{1}{2}$ wherever $\frac{1}{2}$ appears in expression (13). Equating this expression to the nominal break even ratio we have,

$$(14) \quad (1 + t - b - abt)(1+ct) = (1 + t - b - abt - cbt)(1+\tfrac{1}{2}t).$$

Solving this expression for c we have

$$(15) \quad c = \tfrac{1}{2}\,\frac{1+t-b-abt}{1+t-abt+\frac{1}{2}bt}.$$

In Table 5 are given several examples of c satisfying equation (15).

If the overall tariff structure were arranged so that effective and nominal protection were everywhere approximately equal relative to foreign firms this would appear to be the leading candidate for a suitable interpretation of the principles which appear to lie behind the Treaty. However, this does not appear to be true so we have another candidate for economic representation of the principles of the Treaty. One might desire to give Tanzanian firms one-half the effective protection relative to Kenya that they receive relative to foreign firms. This too can be accomplished by choosing an appropriate ratio of transfer tax to tariff rate. To determine this we can equate expression (13), with c substituted for $\frac{1}{2}$, to one half plus one half times expression (5). Writing this out, we have

$$(16) \quad (1 + t - b - abt)(1+ct)(1-b) = \tfrac{1}{2}(1+t-b-abt-bct)(1-b+1+t-b-abt)$$

TABLE 5

TRANSFER TAX RATE (RATIO TO FINAL TARIFF) TO

EQUATE TANZANIAN EFFECTIVE PROTECTION AGAINST KENYA TO NOMINAL

PROTECTION (½ TARIFF RATE)

Final Good Tariff Rate:

	30%				50%				100%			
Import Content	0	30%	50%	70%	0	30%	50%	70%	0	30%	50%	70%
Input Tariff / Final Good Tariff												
0	.500	.372	.291	.214	.500	.381	.308	.239	.500	.395	.333	.277
.5	.500	.367	.279	.190	.500	.375	.292	.208	.500	.388	.313	.233
1.0	.500	.363	.265	.163	.500	.368	.273	.170	.500	.378	.286	.182
1.5	.500	.357	.250	.131	.500	.361	.250	.120	.500	.368	.250	.096

Solving this expression for c we have

$$(17) \quad c = \frac{1}{2} \cdot \frac{(1-ab)(1+t-b-abt)}{(1+t-b-abt-\frac{1}{2}bt(1-ab))}$$

In Table 6 are given several examples of values of c which will satisfy equation (17).[12]

Some Complications

A number of simplifications were made in the analysis above which need to be briefly considered to weigh their importance. It was assumed that the commodity being examined was homogeneous. Comparing similar goods produced in different countries there are often quality differentials as well as differences in design and detail making the goods close but not perfect substitutes. While this would greatly complicate the enalysis it probably does not seriously alter the general tone of the conclusions. It was also assumed that the good under analysis continued being imported from abroad despite the tariff structure. Thus we assumed that the world price (plus tariff) determined the domestic price. For some goods this is not the case and a separate analysis of Tanzanian protection relative to Kenya is needed for the case where the equilibrium price depends on the volume of production. Third, the analysis above was completely static. This limitation is important since the Treaty provides a maximum life of eight years for any particular transfer tax. For a Tanzanian firm considering expanding production by purchasing capital equipment with a life of 15 or 20 years, say, the protection relative to Kenya will only be present for the first part of this period. However, this does not involve a serious change in the results above since, in present discounted value terms, the first eight years is an overwhelming fraction of the life of such equipment. This minor alteration is not valid though for a Kenyan firm considering the purchase of capital equipment to expand its production for the Tanzanian market. If a Kenyan firm could just break even over the entire period then it is probably losing money in the early period while recouping its position in the later years. The present discounted value of profits could probably be increased by delaying the purchase of the capital equipment. Thus the eventual lapse of the transfer tax does not seriously reduce the disincentive for production for Kenyan firms during the life of the tax.

TABLE 6

TRANSFER TAX RATES TO GIVE TANZANIAN FIRMS ONE-HALF THE PROTECTION AGAINST KENYA FIRMS AS AGAINST FIRMS OUTSIDE EAST AFRICA.

Final Good Tariff Rate:

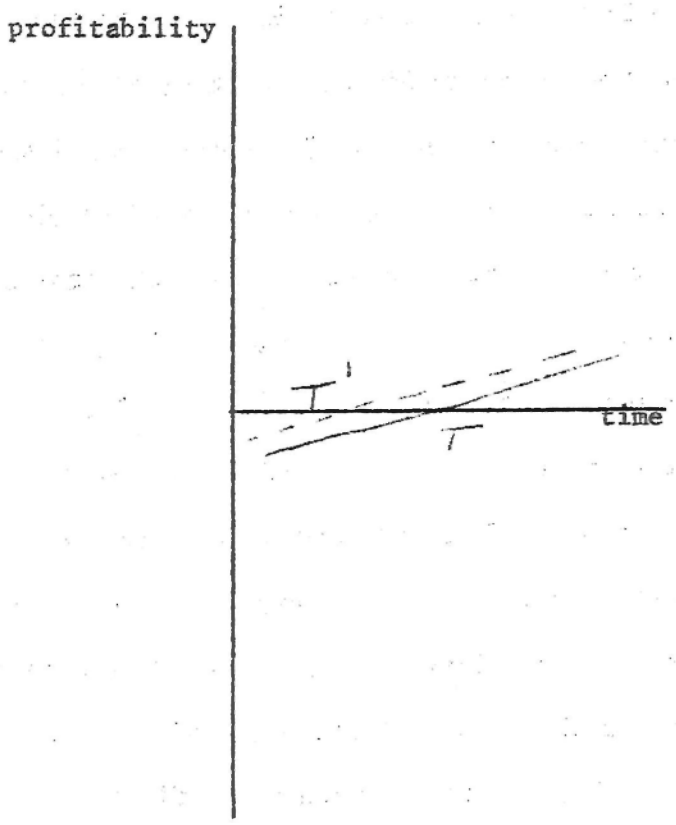
	30%				50%				100%			
Import Content	0	30%	50%	70%	0	30%	50%	70%	0	30%	50%	70%
Input Tariff / Final Good Tariff												
0	.500	.524	.552	.606	.500	.533	.571	.640	.500	.548	.600	.684
.5	.500	.443	.407	.377	.500	.451	.420	.397	.500	.452	.441	.427
1.0	.500	.363	.264	.163	.500	.368	.273	.170	.500	.378	.286	.186
1.5	.500	.283	.129	negative	.500	.287	.132	negative	.500	.294	.136	negative

Negative numbers occur where Tanzanian firms are at a disadvantage.

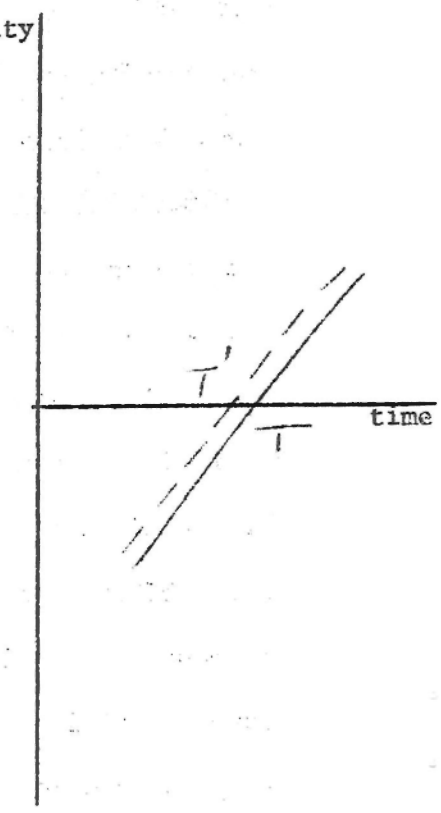
The effective protection arising from the indirect effects of the tax seem more important and more variable in size. If for example, the second plant were to start one year earlier, the impact on the first plants profits in that year would be considerable, probably more than halving them. Since this seems quantitatively important, we need to inquire into the probable impact of the transfer tax on the timing of the start of the second firm. The change in timing will depend on the relation between the increased profitability due to transfer taxation and the rate of growth of profitability from the growth of the East African market. Diagram 2 shows two possible cases. As a result of the transfer tax the potential ppofitability of the second plant gets shifted up from the solid line to the dotted line (we ignore for convenience the fact that the transfer tax will only be in force for a maximum of eight years). In both Diagram 2a and 2b the increased profitability per unit time is the same. However because of different rate of growth of profitability there is a considerable difference in the induced change in timing of the building of the second plant, which will occur when the plant becomes profitable (T or T') for the pattern of profitability shown. If one further takes into account the eventual construction of a third plant the situation becomes more complicated although the basic principles remain the same. For any particular industry, this effect may be large, although this need not necessarily be so.

As the East African experience suggests there are many forms of economic cooperation which are mutually preferable to non-cooperation. A seerch for the particular forms most appealing in the current situation is a valuable search. It might be worth while for the Community to experiment with transfer taxes at less than the full legal rate while sponsoring research into its effects on production.

DIAGRAM 2



2a



2b

New Industries

The analysis above assumed that the commodity being considered was being produced in both East African countries. Presumably, it would be appropriate for small scale industries, where the presence of the transfer tax will affect the market shares being produced in the two countries. A somewhat different analysis is needed for new industries where the entire East African market is needed at first to justify production. Without presenting a formal model we can examine the elements which will determine the importance of transfer taxes in determining the location of the first plant.

We wish to compare the relative advantage of Kenya vis-a-vis Tanzania in the presence of the Treaty with that arising in a common market. Presumably, if a single plant were located in Tanzania or Uganda more than 30% of its output would be exported to the rest of East Africa, even after the appearance of a second plant. Thus it seems likely that no transfer tax would be levied, at least in the near future. Thus the absolute advantage of locating the first plant in Tanzania is not seriously affected by the possibility of transfer taxes.

Now, let us examine the change in advantage from locating in Kenya This change can be divided into two parts, the direct disadvantage of having to pay transfer taxes and the indirect disadvantage of the transfer tax affecting the timing of construction of a second plant, thus greatly decreasing the size of the first plant's market sooner than otherwise. The direct disadvantage does not seem large. The taxes paid will only be paid on a fraction of the output of the first plant - the fraction sold in Tanzania - which will no doubt be less than a third of its output and probably considerably less with uneven territorial division of the East African market. Second, the firm will not start paying taxes until the second plant is set up, which is probably several years into the future. Thus the force of discounting further reduces the importance of transfer taxes relative to the firm's other costs. Combining these two aspects, we see that the effective protection for this decision is probably one-sixth or less (and possibly much less) that described above for currently produced goods.

F O O T N O T E S

1. The right to levy transfer taxes is given to whatever country is in trade deficit in manufactured goods within East Africa. For ease of reference the current situation where Tanzania can levy taxes against Kenyan and Ugandan produce while Uganda can levy taxes against Kenyan produce is referred to.

2. A list of manufactured goods is given in the Treaty, but this is a minimal list since it includes the category miscellaneous manufactured products.

3. This is qualified in that a country whose exports are at least 80% of imports may not levy more transfer taxes although it can maintain existing ones, whether existing taxes must be removed if trade comes into balance is ambiguous in my reading of the Treaty.

4. Determination of the duty paid may be an administrative problem for many-product firms. It should be remembered that this duty is received by the country importing the final good. This is true even if the country of input import gives a duty drawback.

5. This production must either be taking place or reasonably expected within three months.

6. In cases where the transfer tax results in a significant deviation of trade from East African to foreign firms, steps (although the steps to be taken are unspecified) will be taken to prevent the deviation. Determination of deviation as well as definitions of trade balances are based on the statistics of the Customs and Excise Department, involving the usual delays of statistical computation.

7. For a discussion of effective protection see, for example W. M. Corden "The Structure of a Tariff and the Effective Protection Rate," Journal of Political Economy, June 1966.

8. We ignore the presence of excise taxation in Tanzania.

9. We assume for the present that the transfer tax is levied at the full legal rate.

10. This can be seen by differentiations $q_K / P_1(1-b)$ with respect to a and b. The former is always negative and the latter negative for $a > \frac{1}{2}$.

11. This would however remove much of the protection for Kenyan producers of inputs for Kenyan producers of final goods for the Tanzanian market. The present Treaty has the same effect to a lesser degree since the duty paid on the input is not subject to transfer tax.

12. One might attempt to build an economic model of the principles of the Treaty around the notion that a Kenyan firm should pay one half the duty (including transfer tax) that a foreign firm pays. This notion is not very helpful for even without import content this is not true with the transfer tax at the full legal rate. Furthermore, for goods with an import content in excess of one-half and the same tariff rate on input and final good, the Kenyan firm must receive a subsidy to satisfy this relationship. Alternatively one might have Kenyan firms pay in transfer tax one-half the additional tariff due to importing the final good rather than the intermediate good. This is very close to the notion of effective protection used alone.