AN ECONOMIC MODEL OF TRANSNATIONAL TRADE

In this section the verbal example given above is put into a more rigorous "Post-Keynesian" theoretical framework. The Post-Keynesian method bears some superficial similarities to the neo-classical method of our erstwhile devotees, but in essence it is fundamentally different.

Crucial is its perception of capitalism as an inherently unstable creature- a marked contrast to the devotees picture of a self-righting mechanism, where stabilising forces automatically nudge the craft back to line. The Post-Keynesian attitude derives in part from the fact that the theory analyses the economy as it changes, and normally grows, over time. The conditions needed to ensure stability over time are extremely unlikely to occur in the real world.

As with neo-classical analysis, the Post-Keynesian method begins with a simplified model and gradually constructs a more complete model where the issue in question can be explored. The model I will develop is based on the model employed by J.A.Kregel in Post-Keynesian Economics: The Reconstruction of Political Economy. The model takes two economies which are trading with each other and are identical in every way. Both are expanding over time, and if things did not change, they would continue to grow comfortably and tranquilly. Instead, a transmatiomal company based in one country decides to relocate its production to a Third World country and export the products back to our two economies. This decision is fed back into the model to see what effect it has upon the two economies.

We begin with a model where both economies are closed, where there are only two sorts of people- capitalists and workers-, where there are only two sectors, one producing consumer goods, the other producing capital goods, and where workers spend all their wages and capitalists invest all their profits.

For these simple economies to grow tranquilly over time, the following conditions must be fulfilled:

(1) The actual output of both sectors must equal the outputs they planned to produce, In general, expectations must be fulfilled.

(2) The output of the consumption sector must equal the effective demand of workers at the ruling wage rate and price level.

(3) Profits earned in both sectors must equal profits expected and the profit rate must be the same in both sectors.

(4) The output of the investment sector must equal the investment plans of capitalists for the next period, at the ruling level of prices.

(5) The growth rate this investment generates must not be so high as to put a squeeze on available resources (particularly labour, in which case workers might bargain for higher wages), nor so low as to lead to grossly unemployed resources (again especially labour, in which case capitalists might attempt to suppress the real wage).

These conditions are so unlikely to be fulfilled (and the list of conditions grows as more elements of the real world are introduced) that an economy experiencing these conditions is said to be in a "golden age". But since such an economy follows a predictable path, it is a useful standard against which to test the effect of a change in prevailing conditions. The Post-Keynesian method of comparative dynamics works by establishing the required model in a golden age, and then altering the relevant variables. The path the economy takes as a result can be compared to the path it was on before the change: the path of stable growth.

In contrast to neo-classical economics, there is no inherent value judgment that the stable path is naturally better, because Post-Keynesians don't expect a capitalist economy to be stable anyway. What matters are results like "the change results in higher growth and higher real wages but lower profits", or "the change results in lower employment but higher profits". The question of whether the change is good or bad cannot be resolved by any "cost-benefit analysis", but depends entirely on the perspective of the questioner; and the introduction or prevention of the change will depend on the political-economic process, in which economists and their theories play a large part.

Three simplifying assumptions are needed before the simple model can be expressed in linear algebra. These are that output in both sectors is directly proportional to employment, that profits are first calculated as a mark-up over labour costs (they are also calculated as a return on investment and capital), and that capital goods are not exchanged until the end of the time period when profits are known.

The first condition of the golden age, that expectations are fulfilled, needs no mathematical expression at this stage. The second is that the output of the consumption sector equals the effective demand of workers at the ruling price level.

$$p \cdot Q = w \cdot N_c + w \cdot N_i$$

where p is the price level
Q is the output of consumer goods
w is the money wage rate
Nc is employment in the consumption sector
Ni is employment in the investment sector

To calculate profits in the consumption sector we subtract prime costs of production from revenue.

$$P_c = R_q - w \cdot N_c$$

$$= w \cdot N_c + w \cdot N_i - w \cdot N_c$$

$$P_c = w \cdot N_i$$

where Pi = Profits in capital goods sector
Rq = Revenue of the consumption sector

From equation (3), Pc= w.Ni. Put this into equation (4).

The third condition for stability is that profits over labour costs must be the same in both sectors.

$$\frac{P_c}{w \cdot N_c} = \frac{P_i}{w \cdot N_i}$$

$$P_i = \frac{P_c \cdot (w \cdot N_i)}{w \cdot N_c}$$

$$P_i = \frac{w \cdot N_i^2}{N_c} \qquad (5)$$

The fourth condition is that the output of the capital goods sector must equal the profits of both sectors, at the ruling price level.

$$p \cdot I = P_c + P_i \qquad (6)$$

where I= Output of capital goods sector

From equation (3), $P_c = w \cdot N_i$, and from equation (4) we can derive that $P_i = \frac{P_c \cdot (w \cdot N_i)}{w \cdot N_c}$. Put these into equation (6)

$$p \cdot I = w \cdot N_i + \frac{P_c \cdot (w \cdot N_i)}{w \cdot N_c} \qquad (7)\text{, or}$$

$$p \cdot I = w \cdot N_i \cdot \left(1 + \frac{N_i}{N_c}\right) \qquad (8)$$

The final requirement, that the growth rate of the economy must he within a range that does not put pressure on either resources or wages, must be combined with the first condition of fulfilled expectations if we are to calculate the "amount" of capital in the economy To work this out we must know the profit rate that capitalists expect, and that must be the rate they actually achieve. If capitalists are used to a profit rate of k% on capital, then the perceived amount of capital in money terms can be calculated as follows.

$$\frac{Total\_Profits}{Total\_Capital} = \frac{P}{K} = k$$

$$K = \frac{P}{k} \qquad (9)$$

This simple golden age is set out in the following table

GOLDEN AGE ECONOMY #1 (same for both economies)

	Consumption sector	Capital goods sector
Employment	N_c	N_i
Wage rate	w	w
Productivity/worker	l	l
Output	$Q = l \cdot N_c$	$I = l \cdot N_i$
Sales	$p \cdot Q = w \cdot N_c + w \cdot N_i$	$p \cdot I = w \cdot N_i \cdot \left(1 + \frac{N_i}{N_c}\right)$
Profits	$P_c = w \cdot N_i$	$P_i = w \cdot \frac{N_i^2}{N_c}$

Price level

$$p = \frac{w \cdot N_c + w \cdot N_i}{Q}$$

Real Wage

$$\frac{w}{p} = \frac{Q}{N_c + N_i}$$

Valuation of capital

$$K = \frac{P}{k}$$

Rate of growth

$$g = \frac{P}{K}$$

Next we introduce a propensity for capitalists to consume out of profits c, so that capitalists will spend c.P on consumption goods. Equation (1) now becomes

$$p \cdot Q = w \cdot (N_c + N_i) + c \cdot P \qquad (10)$$

For stability to be maintained, the relation Pc/w.Nc =Pi/w.Ni must still hold. Total profits are

$$P = P_c + P_i$$

$$P = P_c + P_c \cdot \frac{N_i}{N_c}$$

$$P = P_c \cdot \left(1 + \frac{N_i}{N_c}\right) \qquad (11)$$

Profits in the consumption sector equal the excess of revenue over costs, expressed in equation (2) as

$$P_c = p \cdot Q - w \cdot N_c$$

Putting (11) and (2) into (10) yields

$$p \cdot Q = w \cdot (N_c + N_i) + c \cdot (p \cdot Q - w \cdot N_c) \cdot \left(1 + \frac{N_i}{N_c}\right)$$

which reduces to

$$p \cdot Q = \frac{w \cdot (1 - c) \cdot (N_c + N_i)}{1 - c \cdot \left(1 + \frac{N_i}{N_c}\right)} \qquad (12)$$

Solving for total profits P with equation (10) yields

$$P = \frac{w \cdot N_i \cdot \left(1 + \frac{N_i}{N_c}\right)}{1 - c \cdot \left(1 + \frac{N_i}{N_c}\right)}$$

The conditions for a golden age where capitalists consume part of their profits are set out on the table below.

GOLDEN AGE ECONOMY #2 (same for both economies)

	Consumption sector	Capital goods sector
Employment	N_c	N_i
Wage rate	w	w
Productivity/worker	l	l
Output	$Q = l \cdot N_c$	$I = l \cdot N_i$
Sales	$p \cdot Q = \frac{w \cdot (1 - c) \cdot (N_c + N_i)}{1 - c \cdot \left(1 + \frac{N_i}{N_c}\right)}$	$p \cdot I = \frac{w \cdot (1 - c) \cdot N_i \cdot (N_c + N_i)}{N_c \cdot \left[1 - c \cdot \left(1 + \frac{N_i}{N_c}\right)\right]}$
Profits	$P_c = \frac{w \cdot N_i}{1 - c \cdot \left(1 + \frac{N_i}{N_c}\right)}$	$P_i = w \cdot \frac{N_i^2}{N_c \cdot \left[1 - c \cdot \left(1 + \frac{N_i}{N_c}\right)\right]}$

Price level

$$p = \frac{w \cdot (1 - c) \cdot (N_c + N_i)}{Q \cdot \left[1 - c \cdot \left(1 + \frac{N_i}{N_c}\right)\right]}$$

Real Wage

$$\frac{w}{p} = \frac{Q \cdot \left[1 - c \cdot \left(1 + \frac{N_i}{N_c}\right)\right]}{(1 - c) \cdot (N_c + N_i)}$$

Valuation of capital

$$K = \frac{P}{k}$$

Rate of growth

$$g = \frac{Net\_I}{K} = (1 - c) \cdot k - d$$

where d is the rate of depreciation

The final stage in the development of the model is to open the economies up to international trade. For the economies to remain on a golden age path, trade has to be balanced, not just overall, but also with respect to consumption goods and capital goods. Exports of capital goods will have to equal imports of capital goods. As with foreign trade, so also with foreign investment: capital transfers will have to be balanced for both sectors. I assume that only distributed profits are transferred from one country to another; undistributed profits are kept within the economy to finance investment plans.

The important identities for trade are

$$Q = Q_d + X_q$$

$$\vec{Q} = Q_d + M_q$$

$$I = I_d + X_i$$

$$\vec{I} = I_d + M_i$$

where Q = Total domestic output of consumer goods
Qd = Consumer goods output for local sale
$\vec{Q}$ = Total domestic consumption of consumer goods
Xq = Domestic output of consumer goods for export
Mq = Imports of consumer goods
and similar definitions apply for capital goods

The important identities for capital transfer are

$$P_c = P_{c_d} + F_c$$

$$\vec{P_c} = P_{c_d} + H_c$$

$$P_i = P_{i_d} + F_i$$

$$\vec{P_i} = P_{i_d} + H_i$$

where Pc = Profits generated in the consumption sector
Pcd = Consumption sector profits accruing to local capitalists
$\vec{P_c}$ = Total profits accruing to domestic consumption sector capitalists
Fc = Consumption sector profits accruing to foreign capitalists
Hc = Overseas profits of local consumption sector capitalists
and similar definitions apply for capital goods

In our two economy model, the exports of one economy are the imports of the other. Imports are determined by a propensity to import and the level of income.

$$M_q^b = X_q^a = \frac{m \cdot \left[w \cdot \left(N_c^b + N_i^b \right) + c \cdot P^b \right]}{p^b} \quad (14)$$

where M_q^b = Economy B's imports of consumer goods
m = propensity to import of economy B
N_c^b = Employment in the consumption sector of economy B
N_i^b = Employment in the investment sector of economy B
P^b = Profits in economy B
p^b = Price level in economy B
Similar definitions apply for economy A.

Remittance of profit from one economy to another is determined by the level of foreign ownership of the economy, and the propensity to consume out of profits. Repatriation of profits made in the consumption sector of economy A to investors in economy B can thus be expressed as

$c \cdot F_c^a = c \cdot f \cdot P_c^a$ where f = the level of foreign ownership in the consumption sector of economy A

Similar definitions apply for remittance of profits to investors in economy A from their firms in economy B; and vica-versa. The following table gives the full specifications needed for an open economy to experience golden age growth

GOLDEN AGE ECONOMY #2 (same for both economies)

	Consumption sector	Capital goods sector
Employment	N_c	N_i
Wage rate	w	w
Productivity/worker	l	l
Output	$Q = l \cdot N_c$	$I = l \cdot N_i$
Sales	$\vec{p} \cdot Q = \dfrac{w \cdot (1-c) \cdot (N_c + N_i)}{1 - c \cdot \left(1 + \dfrac{N_i}{N_c}\right)}$	$\vec{p} \cdot I = \dfrac{w \cdot (1-c) \cdot N_i \cdot (N_c + N_i)}{N_c \cdot \left[1 - c \cdot \left(1 + \dfrac{N_i}{N_c}\right)\right]}$
Exports	$X_q = \dfrac{m \cdot w \cdot (1-c) \cdot \left(N_c^{\,b} + N_i^{\,b}\right)}{1 - c \cdot \left(1 + \dfrac{N_i^{\,b}}{N_c^{\,b}}\right)}$	$X_i = \dfrac{m \cdot w \cdot (1-c) \cdot N_i^{\,b} \cdot \left(N_c^{\,b} + N_i^{\,b}\right)}{N_c^{\,b} \cdot \left[1 - c \cdot \left(1 + \dfrac{N_i^{\,b}}{N_c^{\,b}}\right)\right]}$
Balance of trade	Nil	
Profits	$P_c = \dfrac{w \cdot N_i}{1 - c \cdot \left(1 + \dfrac{N_i}{N_c}\right)}$	$P_i = w \cdot \dfrac{N_i^{\,2}}{N_c \cdot \left[1 - c \cdot \left(1 + \dfrac{N_i}{N_c}\right)\right]}$
Remittances	$c \cdot H_c = c \cdot h \cdot P_c^{\,b}$	$c \cdot H_i = c \cdot h \cdot P_i^{\,b}$
Repatriations	$c \cdot F_c = c \cdot f \cdot P_c$	$c \cdot F_i = c \cdot f \cdot P_i$

Price level

$$p = \frac{w \cdot (1-c) \cdot (N_c + N_i)}{\vec{Q} \cdot \left[1 - c \cdot \left(1 + \dfrac{N_i}{N_c}\right)\right]}$$

Real Wage

$$\frac{w}{p} = \frac{\vec{Q} \cdot \left[1 - c \cdot \left(1 + \dfrac{N_i}{N_c}\right)\right]}{(1-c) \cdot (N_c + N_i)}$$

Valuation of capital

$$K = \frac{P}{k}$$

Rate of growth $g = (1-c)\cdot k - d$

We now take a transnational firm, owned by capitalists of economy A, which produces consumer goods in both economies. It is the "representative firm" of the consumption sector, except that it is not yet involved in importing and exporting. Its profile is as follows (entries in the centre are identical for both economies).

FIRM Z

	Economy A		Economy B
Employment		$z\cdot N_c$	
Wage rate		w	
Productivity/worker		l	
Output		$z\cdot l\cdot N_c$	
Sales		$\dfrac{z\cdot w\cdot(1-c)\cdot(N_c+N_i)}{1-c\cdot\left(1+\dfrac{N_i}{N_c}\right)}$	
Exports		Nil	
Imports		Nil	
Profits		$\dfrac{z\cdot w\cdot N_i}{1-c\cdot\left(1+\dfrac{N_i}{N_c}\right)}$	
Remittances	$\dfrac{z\cdot c\cdot w\cdot N_i}{1-c\cdot\left(1+\dfrac{N_i}{N_c}\right)}$		Nil
Repatriations	Nil		$\dfrac{z\cdot c\cdot w\cdot N_i}{1-c\cdot\left(1+\dfrac{N_i}{N_c}\right)}$
Consumption out of profits	$\dfrac{2\cdot z\cdot c\cdot w\cdot N_i}{1-c\cdot\left(1+\dfrac{N_i}{N_c}\right)}$		Nil
Purchase of capital goods	$\dfrac{z\cdot(1-c)\cdot w\cdot N_i}{1-c\cdot\left(1+\dfrac{N_i}{N_c}\right)}$		$\dfrac{z\cdot(1-c)\cdot w\cdot N_i}{1-c\cdot\left(1+\dfrac{N_i}{N_c}\right)}$
Rate of growth		$(1-c)\cdot k - d$	

If the firm continued to behave in this fashion, then in the next period its capital stock would be (l-c)k - d higher, it would increase employment by (l-c)k - d, its output would be up by (l-c)k -yielding (l-c)k - d higher profits at the same rate of profit, level of wages and prices. This is, so to speak, a "firm's eye view" of the overall tranquility of the two economies.

Instead, the firm decides to relocate production to a third world country where wages and capital costs are much lower. The capital goods needed will be purchased from economy A's capital goods sector, and shipped to the third world country. Once the decision to relocate is made, the firm ceases all investment in economies A and H: both plants have sufficient excess capacity to cope with demand until the new factory is built. When that factory is completed, the factories in A and B will be closed down. The products will be imported into A and B at cost price and sold at the ruling price level p.

The move can be broken down into two stages, and injected into the "golden age" economies to see in which directions the relocation will push employment, profits, growth and the distribution of income.

In the first stage, the firm ceases investment in A and B for domestic expansion, and lets contracts to construct the capital goods needed for the new factory in A's capital goods sector. At this stage there is no direct effect on consumption in either economy. The firm lets both factories run down, while keeping consumption out of profits constant. All its undistributed profits from both A and B now go to pay for the capital goods needed for the new factory.

Taking economy B first, since domestic investment by firm Z has ceased, sales of capital goods will be down by

$$\frac{z\cdot(1-c)\cdot w\cdot N_i}{1-c\cdot\left(1+\frac{N_i}{N_c}\right)} \qquad \text{(a)}$$

Expected sales of capital goods were:

$$p\cdot I^e = \frac{w\cdot(1-c)\cdot N_i\cdot\left(N_c+N_i\right)}{N_c\cdot\left[1-c\cdot\left(1+\frac{N_i}{N_c}\right)\right]} \qquad \text{(b)}$$

Actual sales are (b) minus (a):

$$p\cdot I^a = \frac{w\cdot(1-c)\cdot N_i\cdot\left(N_c+N_i\right)}{N_c\cdot\left[1-c\cdot\left(1+\frac{N_i}{N_c}\right)\right]} - \frac{z\cdot(1-c)\cdot w\cdot N_i}{1-c\cdot\left(1+\frac{N_i}{N_c}\right)} \qquad \text{(c)}$$

The only direct effect on the consumption sector at this stage is an increase in capital outflow of $z\cdot(1-c)\cdot P_c$. The first stage of the relocation thus has contractionary effects on both sectors of B's economy, acting through sales in the investment sector and capital outflow in the consumption sector. In the investment sector, if price is inflexible downwards, then at the end of the period capital goods sector capitalists will find themselves with excess stocks on hand. Profits will be lower than anticipated, and consumption will have taken a higher proportion of actual profits than anticipated. One probable response would be to reduce investment and production for the next period, further reducing investment demand and causing reduced consumption demand through a fall in employment.

Consumption sector capitalists are at this stage unaffected, though the capital outflow may have a contractionary effect on demand. However they will feel the brunt of the decisions of investment sector capitalists in the next period. The economy has swung off the "golden path"towards a recession.

Economy A's fate depends on whether the firm simply purchases more capital goo~s from the capital goods sector, or lets specific contracts with firms in the capital goods sector. Taking the second employment and output in the investment sector adjust to new demand. Sales of capital goods are now

$$p \cdot I^a = \frac{w \cdot (1-c) \cdot N_i \cdot (N_c + N_i)}{N_c \cdot \left[1 - c \cdot \left(1 + \frac{N_i}{N_c}\right)\right]} + \frac{z \cdot (1-c) \cdot w \cdot N_i}{\left[1 - c \cdot \left(1 + \frac{N_i}{N_c}\right)\right]}$$

$$p \cdot I^a = \frac{w \cdot (1-c) \cdot N_i \cdot (N_c \cdot 1 + z + N_i)}{N_c \cdot \left[1 - c \cdot \left(1 + \frac{N_i}{N_c}\right)\right]}$$

$$p \cdot I^a = (1+z) \cdot p \cdot I^e - z \cdot (1-c) \cdot P_i^e$$

The employment needed to produce this new output is

$$N_i^a = \frac{(1+z) \cdot N_i \cdot \left[N_c + (1-z) \cdot N_i^e\right]}{N_c \cdot \left(1 + \frac{N_i}{N_c}\right)}$$

This increased employment will increase demand in the consumption sector by

$$w \cdot \left(N_i^a - N_i^e\right) = \frac{w \cdot N_i^e \cdot z \cdot \left(N_c - z \cdot N_i^e\right)}{N_c \cdot \left(1 + \frac{N_i}{N_c}\right)}$$

This breaches the "golden age" assumptions of stability for this period, and it is not possible to specify the exact effects on the level of demand because profits rates will be affected, and expectations are not being fulfilled. The potential effects depend upon the responses of consumption sector capitalists to the increased demand. They could respond by increasing output to cope with the new demand, which itself would add to demand and lead to a boom in comsumption sales. Or they could keep production constant and inflate the general price level, which would reduce the real wages of workers and perhaps lead to demands for higher wages. Either way, profits will be higher in both sectors than anticipated, and the economy will start to expand more rapidly. One countervailing effect in the next period will be reduced export sales to economy B.

In the second stage, the factories in A and B are closed down and the products are imported from the Third World country.

The firm had planned to sell its expected share of the consumption market at the expected price, yielding much higher profits due to its much reduced costs of production. Its expected sales in each economy were

$$p \cdot I^a = (1-z) \cdot p \cdot I^e + z \cdot (1-c) \cdot P_i^e \qquad \text{(d)}$$

$$z \cdot p \cdot \vec{Q}^e = \frac{z \cdot w \cdot (1-c) \cdot (N_c + N_i)}{1 - c \cdot \left(1 + \frac{N_i}{N_c}\right)} \qquad \text{(i)}$$

But at the start of the period the firm lays off its employees yielding actual employment in each consumption sector of

$$N_c^a = N_c^e - z \cdot N_c^e = (1-z) \cdot N_c^e \qquad \text{(j)}$$

Demand from workers for consumption goods will fall to

$$w \cdot N_c^a = w \cdot (1-z) \cdot N_c^e + w \cdot N_i = w \cdot \left[(1-z) \cdot N_c^e + N_i\right] \qquad \text{(k)}$$

This will result in reduced sales of consumption goods and reduced profits in the consumption sector for both economies. For economy B this fall in employment 4nd demand compounds the effects of the first stage. The importing of products by the firm adds to the balance of payments effect of the first period, as the balance of trade is pushed into the red (there is a slight countervailing force here as reduced national income will slightly reduce imports from economy A). This is compounded even more by the greatly increased capital outflow at the end of the period, as the firm remits all its increased profits to economy A.

where P_i^e = Expected profits in the investment sector

The first stage increased employment and output in economy A, so the fall in employment and demand in the second stage runs counter tc the original trend. The net effect depends on both the time difference between the two effects, and their relative magnitudes. The influence of time cannot be calculated; though the relative magnitudes of the can be compared. The increased demand from workers due to the first stage was

$$w\cdot\left(N_i^a - N_i^e\right) = \frac{w\cdot(1+z)\cdot N_i\cdot\left[N_c + (1-z)\cdot N_i\right]}{N_c + N_i} - w\cdot N_i \qquad \text{(l)}$$

The decrease in demand from workers due to the second stage is

$$w\cdot\left(N_c^a - N_c^e\right) = -z\cdot w\cdot N_c \qquad \text{(m)}$$

Equation (m) will exceed equation (1) if Nc exceeds Ni: that is, the deflationary effects of the second period will exceed the expansionary effects of the first period if the consuntion sector is larger than the capital goods sector.

Added to the deflationary effects of the firm sacking its workforce is the termination of investment contracts. The substantial investment needed to establish the factory in the third world was a "once only" boost, and purchases of capital goods from economy A's capital goods sector will fall to the level needed to service the new factory. There will be a resultant fall in the sales of capital goods, employment of workers and demand from workers.

Two effects which alter the distribution of income in favour of capitalists will also partially offset the decline in consumption by workers: they are the large increase in profits made by the firm in both economies, and increased repatriation of profits from economy B. Had the firm not undertaken the relocation, its expected and actual sales would have been

$$\frac{z\cdot w\cdot(1-c)\cdot\left(N_c + N_i\right)}{1 - c\cdot\left(1 + \frac{N_i}{N_c}\right)}$$

This would have yielded profits net of wages of

$$\frac{z\cdot w\cdot N_i}{1 - c\cdot\left(1 + \frac{N_i}{N_c}\right)}$$

Instead, the potential margin between sales and wages will be much higher because the wage bill is much lower. But even in the limiting case where actual sales equalled expected sales and wage costs were nil, the increased spending by the firms shareholders out of increased distributed profits would be negligible against the decreased spending by workers. Seen from the perspective of this model, the net effect of the relocation on employment and national income is likely to be negative, particularly for host economies. Transnationals which relocate will achieve much higher rates of profits, but their sales will be down because the relocation will reduce the effective demand of target markets.