The Relocation of Production and Aggregate Demand

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The growth of manufactured exports from East and South East Asia signifies more than simply an expansion of the cast on the stage of industrialisation. It heralds a complete change of plot - as if the new actors could only be accommodated by re-writing the script. And in this revised version of the International Trade Show, the leading author is the transnational corporation.

As with most dramas, the person most responsible for the whole production--the script writer--is the one least understood by the audience, and the critics. Most try to pretend she doesn't exist, trying instead to deduce the plot by referring to the on-stage personalities, always referring to past history. A limited fraternity of detractors prefer instead to regard the script writer as a sinister and uncontrolled force, playing with the actors as toys and producing not a drama, but a farce, more susceptible to backstage whims than to any inherent logic in the plot and human relations.

In this paper I intend treading a more enlightened path. This will be a 'film critique' which concentrates on the script writer, not the actors; at the same time, it will be aware that the wielder of the pen is not a totally free agent - she must conform to the logic of the plot, though developments in the plot over time given her latitude to introduce new elements. With critic's prerogative, I will of course make occasional sideswipes at the other critics, whom I place in either the 'devotees' or 'detractors' box.

1 ACT ONE: THE AGE OF INTERPENETRATION

1.1 From national to international capital

Our script writer arrived on the scene as part of the cast, at the completion of the Second World War, an event clearly penned by the nation-state. Before the War, corporations were, by and large defined by their national borders. The sale of a product made in Europe to an American buyer was more than likely a sale from a European national to unrelated American one.

The war ended this conventional commerce, and for a variety of reasons in the wake of the War it was joined by a 'new' form - direct investment by firms of one nationality in the economies of others. This 'Age of Interpenetration' began under the Marshall Plan for the reconstruction of Europe, with massive United States investment which assisted the rebuilding of Europe's devastated industries. As European capital became viable this all too visible 'helping hand' came to be regarded as a potential danger to European sovereignty, a threat Servan-Schreiber dramatised as the 'American Challenge'. To quote Barnet and Muller (two critics who definitely belong in the 'Detractors' Box),

> "(By the late 1960s) according to Servan-Schreiber, US based firms produced 80% of the computers, 95% of the integrated circuits.. and 15% of consumer electronic products. Whilst US based companies controlled less than 5% of Europe's business as a whole, they were well on the way to controlling the most advanced and dynamic sectors of the European economies, leaving the laundries, restaurants and utilities to the natives". (Barnet & Muller 1974: 39)

According to Barnet & Muller,

> "The weapon brought up to stop the American corporate invasion was the government inspired merger", which "stemmed somewhat the American

> Challenge but produced ever-greater concentration of wealth and power in fewer and fewer hands in the process". (Barnet & Muller 1974: 39)

An equally important response was the investment by revitalised European industry in the United States, as Europe returned the American interpenetration with one of its own. Japan completed the threesome, but the complexities of dealing with Japan Inc. meant that neither Europe nor America secured even a toehold there.

Out of all this jostling for positions, this rather impolite stepping into other people's limelight, were borne the transnational corporations, better known then by the stage name Multinationals. They confused the plot quite a bit because nationalities and firms were no longer co-extensive. One could no longer be certain that when talking with a Frenchman, he wasn't concealing a North American twang.

This confusion was reacted to quite differently by the two sets of critics. The 'devotees' decided eventually that they would continue with traditional geography - it didn't matter that there was an American firm on French soil, it was still France and could be expected to behave as France always had. The basic plot, dominated by the nation-state and establishing the moral of the invisible hand of the market, had not changed. The 'detractors', who had never felt enamoured to the plot in the first place, split into two groups - those who continued to direct their venom at much the same plot, and those who believed that the multinational corporation had thrown the plot (the market) out the window. The latter attitude is eloquently put by Barnet & Muller

> "The global corporation has delivered the coup de grace to the market. True, the power accumulated by giant oligopolies to control supplies, set prices and create demand had made an anachronism of the classic concept of the market even before Big Business became global. But globalisation completed the process. At the minimum, almost half of the transactions involving US based global firms are those in which the buyer and the seller are essentially the same --ie. intracorporate sales, loans and other transfers. In such situations the notion of a fair market price is lost. When parties to a transaction are not dealing at arm's length, there are no external criteria for judging the public consequences. The negation of the market means that global profit maximising becomes the guiding star in every transaction, and that corporate managers have far more freedom than classic entrepreneurs to arrange profit-maximising strategies at the expense of the public interest". (Barnet & Muller 1974: 229)

Both sets of critics had adopted inappropriate and ill fitting glasses to accommodate the new cast member to their vision, and as a consequence both developed a distorted picture of reality - to the confoundment of the audience.

The 'devotees', by pretending that all international trade could still be interpreted as trade between nations, began a long journey down the path of nostalgic obsolescence as they ignored that growing proportion of international 'trade' which crossed national borders without ever changing hands. The 'detractors' were up with recent developments, but drastically limited their ability to make cogent criticism by pretending that the market had ceased to exist, that multinationals were untrammelled creatures whose behaviour could be understood by postulating some 'evilness index'.

We shall ignore both schools for the meantime and look at the world at the end of the 'Age of Interpenetration' from the point of view of the multinational corporation.

1.2 The scope of transnational capital

First, some data (all the following tables are from *Transnationals in World Development: A Re-Examination. United Nations, May 1978*). By 1973 there were 9,481 firms which could be classified as multinational. Of these, almost half had only one overseas branch, while only 324 (3.4%) had branches in more than 20 countries.

Multinationals which were based in the United States were responsible for about half of all sales by multinationals; Japan, the United Kingdom and Germany were a long distance second. The overwhelming majority of multinationals were owned solely by the nationals of one country.

TABLE ONE*

*Table III-8. Firms with one or more foreign affiliates, by the number of host countries, 1973

Number of host Countries	Number of firms based in: European Economic Community	United States	Other countries	Total: Number	Total: Percentage of grand total
1	1,807	1,136	1,312	4,255	44.9
2	783	334	383	1,500	15.8
3	454	206	197	857	9
4	293	140	111	544	5.7
5	232	95	82	409	4.3
6	144	88	51	283	3
7	128	75	31	234	2.5
8	92	45	32	169	1.8
9	78	56	29	163	1.7
10	54	44	17	115	1.2
11	45	37	22	104	1.1
12	41	37	14	92	1
13	34	22	12	68	0.7
14	43	26	12	81	0.9
15	29	25	11	65	0.7
16	23	17	5	45	0.5
17	20	14	8	42	0.4
18	11	25	5	41	0.4
19	26	14	5	45	0.5
20	22	18	5	45	0.5
more than 20	173	113	38	324	3.4
Grand total	4,532	2,567	2,382	9,481	100
percentage)	47.8	27.1	25.1	100	

TABLE TWO*

*Table III-9. Sales of 4,530 firms by country or territory of origin, 1973

Country of Territory for which information is available	Number of firms	Millions of dollars	% of total dollars
United States	1,199	680,135	46.7
Japan	149	202,178	13.9
United Kingdom	958	167,248	11.5
Germany, Federal Republic of	674	136,481	9.4
France	304	74,301	5.1
Netherlands	196	52,302	3.5
Italy	75	36,980	2.6
Sweden	203	25,507	1.7
Canada	136	22,796	1.6
Switzerland	116	18,635	1.3
Belgium	91	9,199	0.6
Australia	56	8,412	0.6
Denmark	72	5,545	0.4
Norway	79	2,811	0.2
Finland	38	2,386	0.2
Luxembourg	6	2,350	0.2
Austria	20	1,958	0.1
New Zealand	20	1,913	0.1
Ireland	25	1,374	0.1
Portugal	3	850	0.1
Spain	5	845	0.1
Philippines	2	399	-
Hong Kong	4	249	-
Singapore	6	216	-
Lichtenstein	1	61	-
Malaysia	2	9	-
Total	4,530	1,455,140	

However, for the largest of the multinationals, sales in host countries were a significant source of turnovers; for 50 of these foreign sales accounted for over half total turnover.

TABLE THREE*

Table 111-10. Foreign content of the world's 422 largest industrial corporations, by

(Number of firms)

Foreign content (percentage)	United States	Japan	United Kingdom	Germany, Federal Republic of	Other developed countries	Devel count
more than 75	-	-	6	-	14	
51-75	12	1	9		9	-

26-50	79	4	14	4	9 -
0-25	97	21	10	14	14
less than 5	21	16	1	1	6
Nil	13		1	3	4
Unknown	10	7 -		5	16
Total	223	49	41	27	72

Exchanges between branches of the same firm accounted for a significant proportion of total turnover, and could have accounted for half of international trade. According to the United Nations,

> "63% of imports into the United States were related to transnational corporations in one form or another. Table III-17 shows that for the United States firms, approximately three quarters of these imports were intra-firm." (UN 1978: 43, note 78)

Of these 63% of imports, over half were from American owned companies operating abroad; in effect, from the point of view of America multinationals, over half of America's foreign trade is trade with America.

TABLE FOUR*

*Table 111-16. Share of transnational corporation-related imports into the United S

United States imports by country group, 1974

Country & Country group of origin	United States Imports (Millions of Dollars)	Sales to the USA by majority owned foreign aff United States companies	
		(Millions of Dollars)	(Percentage)
World	99,160	31,801	
Developed market economies	59,690	14,830	
Canada	21,800	11,411	
Europe	22,990	3,077	
Japan	12,930	127	
Others	1,970	215	
Developing countries	39,470	14,763	
Latin America	18,390	6,415	
Asia and Africa	21,080	8,348	

For United States based multinationals, three quarters of the exports from subsidiaries in the rest of the world to America were intra company transfers. About half of the exports by American subsidiaries to third countries (eg. a sale by Ford England to an European country) were intra-firm transfers. If similar proportions applied for the multinationals of other countries, by the early 70's over half of the Western world's "international trade" was in reality, transfers between branches of the same firm.

TABLE FIVE*

*Table 111-17. Share of intra-company sales of majority-owned foreign affiliates of United States-based transnational corporations in their total sales, by destination of sales and by country group 1971 and 1975 (Centre on Transnational Corporations, based on preliminary data supplied by the United States Department of Commerce)

Host country and country group	Share of affiliate exports to parent in total affiliate exports to the United States		Share of affiliate exports to other affiliates in total affiliate exports to third countries	
	1971	1975	1971	1975
World	74	74	53	42
Developed market economies				
Canada	74	61	45	33
Europe	85	87	62	64
Others	62	97	37	32
Total	76	65	60	60
Developing countries				
Latin America	69	85	56	73
Africa	79	95	73	74
Middle East	59	43	23	14
Asia	93	100	74	65
Total	69	82	42	30

In delineating the domain of a multinational, first and foremost is the home country, now by no means the limit of its activities but in all likelihood home to all its shareholders; it is where the buck, so to speak, finally stops. It is also the place where the chief executives reside, where primary decisions are taken and leading research and development occurs.

Secondly, there are the overseas subsidiaries in the "host" economies. The preceding tables have shown the importance of these foreign subsidiaries to the parent companies and their shareholders. In the Age of Interpenetration, each subsidiary, once established, acted somewhat like a miniature of the parent. It was managed locally, it produced in the host economy for sale to the host market; given the limitations imposed by communications technology and transport costs, it was the only way to operate. Despite this, over time the products produced by each transnational gradually lost national idiosyncrasies (the product which has held out the longest is obviously the motor car) under the combined weight of home based product innovation and international advertising. Products around the globe became more standardised, and an automatic toaster in America looked like an automatic toaster in England - something which would not have happened under a regime of national firms.

By far the most important subsidiaries are those in other developed countries. Any branches which had been established in Third World countries when they were pursuing "import-oriented-industrialisation" were small, designed to cater for a limited domestic market, and technologically second rate.

Thus at the close of the "Age of Interpenetration", the multinational had become the dominant actor on the stage, causing multiple complications to the plot which, fortunately for our "devotees", was still largely penned by the nation-state:

- In the traditional story, nations were forced to rely upon their own resources (capital and labour), so you could be pretty sure they would employ them to the best advantage: a country with an abundance of labour would produce its needs with labour-intensive methods, while a country with an abundance of capital would produce its needs with capital intensive methods. The whole point of the International Trade Show as to make this process more efficient, by letting labour abundant nations concentrate on producing labour-intensive goods, and capital abundant countries produce capital intensive goods. The fact that capital could now cross national boundaries, so that the methods of production in one country were not necessarily limited by its own resources, confused the scene; but so long as the actual capital goods were produced locally, the classical interpretation was not completely invalidated.

- In the traditional story, an income earned in country A accrued to some owner of capital or labour in country A; maximising the income of country A therefore necessarily maximised the incomes of the people of country A. This traditional morality of just returns for just efforts was sullied by the fact that a large slab of the profits made in A now accrued to investors in country B; but one got around the problem by believing in honour between capitalists - those of country B wouldn't really rip country A off.
- In the traditional story, trade between countries occurred at a fair market price, because country A and country B were economically separate individuals. Now over half of international trade was a transfer from a firm in country A to a related firm in country B; straddling the economies was an intermediary which could indulge in unscrupulous behaviour. But so long as the subsidiaries of multinational companies acted as independent entities, the potential for this was minimised.

The " detractors", on the other hand, had seized upon these irregularities to the exclusion of the plot, and were looking avidly for further irregularities. As a consequence they were the first to spot the basic changes in the script that marked the accession of the multinational to the title "Transnational" and the dual role of actor and script-writer; but having abandoned analysis of the plot as a method of criticism, they were unable to predict how it was going to affect the actors.

The changes to the script fall under four main headings:

- Standardisation
- Transportation
- Communication
- Export Oriented Industrialisation

1.2.(1) Standardisation

As mentioned earlier, the products of each transnational had become standardised over time, with the most belated arrival on this scene being the "world car". Linked with this was the standardisation of the production process for each good; over tine there was less and less difference in the way General Electric produced a fridge in England and the way it produced it in America.

1.2.(2) Transportation

Containerisation greatly accelerated the handling of finished goods and intermediate goods. It also fed back into the standardisation of production by encouraging "modular construction" of products, since shipping of modular products in knocked down form greatly reduced shipping volume.

1.2.(3) Communication

The phenomenal development of telecommunications and data processing made communication inside the transnational far more rapid, with two consequences which are well put by Barnet & Muller -

> "The communications satellite makes it possible for the top corporate executive to 'think globally' in the comfort of his office. Telephone

connections from New York to Santiago or Peking are excellent... Indeed, corporate executives in underdeveloped countries in Latin America and Africa often have the frustrating experience of being able to hear the boss in New York perfectly, but not the customer at the other end of a barely functioning local phone." (Barnet & Muller, 1974: 35)

Combined, these changes meant that it was now possible to run a global corporation in a truly global fashion. The decision-making could be concentrated ill the home country. Production could occur where it was cheapest. Sales could occur wherever good returns were likely. It was now possible to divorce all the functions of a large corporation from their previous links on a regional basis, and integrate the function over the world economy. This does not mean, as the " detractors" have taken it to mean, that the transnational corporation has "transcended" t~ market. Their thoughts of relocation were not entertained because they has risen above the market, but because they were responding to changing circumstances in the market. However, the market to which they were responding had long since ceased to be the market of the small firm and the nation state; it had become the market of the transnational corporation.

1.2.(4) Export-Oriented Industrialisation

The underdeveloped countries, bedraggled bit actors in every series since the Colonial one, were becoming aware that "Import-Substitution-Industralisation", their last attempt to capture leading roles, had failed. The economic take-off promised them by Rostow had not materialised, balance of payments constraints to growth were exacerbated by profit remittances by Western companies, and the industrial structure they had assembled was badly co-ordinated and technologically backward. Urban unemployment was a growing challenge to the security of the elites, particularly unemployment of the young educated middle classes who had been led to expect better things. A change of direction was required. As the Director of Malaysia's Federal Industrial Development Authority (FIDA) put it,

> "In 1967 Malaysia was still pursuing a course of import substitution and there were hardly any export-oriented manufacturing enterprises existing or even contemplated. The establishment of .... saw a rapid change in the above picture.. .As I had mentioned earlier, in 1967 Malaysia's industrial base consisted primarily of import-substituting industries. One of the serious problems facing the Government at the time was unemployment of our youth after both secondary and tertiary education levels.
>
> Consequent to the disturbing incidents of 1969, the Government recognised that one of the prime reasons for the problem was poverty and unemployment. FIDA was directed... to look into ways and means to create rapid employment opportunities, for Malaysia's unemployed, within the manufacturing sector. In response to this directive, FIDA established a task force to investigate the possibilities and prospects for accelerated industrialisation, and the findings of this task force set the stage for Malaysia to move into a new era of industrial development, ie, the era of export orientation." (FIDA 1977)

The aim of this policy was simple: to entice Western companies to relocate their production from the developed countries to the Third World, and export those products back to markets in the developed world. This "happy coincidence" between the development plans of Third World nations and the production possibilities of transnational corporations has given rise to the second Age of transnationals, the "Age of Relocation".

2.1 A new structure to manufacturing production.

The most obvious reason why a transnational would choose a Third World country as the site to relocate its production to is labour costs. Jean Currie of the Economist Intelligence Unit found that

> "The desire to protect an existing market in a developed country is often the reason why an international company with labour intensive processes decides to locate in a developing country... In most EPZs (Export Processing Zones) average wage costs for semi-skilled and unskilled, labour are under $0.50 an hour.. In 1977.. average hourly wage costs for unskilled female labour in the UK were US$3.97, in West Germany $7.93, in Australia $6.50 and in the USA, $9.00. Wage costs in the UK then were 8 to 28 times higher than in most of the countries reviewed here, and in the USA they were 16 to 57 times greater." (Currie, 1979: 25)

Also important is the development that, frequently,

> "Technological change will increase labour requirements in one process. The revolution in semi-conductor technology.. .has radically changed the number and nature of component requirements.. .Fewer parts are now needed to produce an electronic product and in general the labour intensiveness of electronics production is on the decline. The total effect of this revolution is complex... the effect of the silicon chip revolution is to increase the importance of one labour intensive process in the manufacture of semi-conductors. The three basic processes in semi-conductor technology are mask-making, wafer fabrication and assembly testing. The first two processes are complex and require the use of highly automated equipment. The cost of the whole process depends on the proportion of silicon wafers that can be used in final assembly. Early in the life of a particular product a 4% yield is considered high. As technology improves, the yield improves and the cost of wafer fabrication in the overall process diminishes. Consequently the relative importance of assembly testing, which is the more labour intensive part of the process, increases once the product becomes established." (Currie 1979: 31-32)

As Ho Kwon Ping expresses this paradox,

> "Increasingly sophisticated Western technology has made cheap, semi-skilled Asian labour a strategic commodity. The new processing technologies are designed to combine automated, capital intensive production with their assembly of unskilled or semi-skilled workers." (Ho, 18/5/1979: 76)

Thus contrary to popular folklore, the export boom of Southeast Asia is not limited to labour-intensive low technology production, but embraces a rapidly widening field of production which weds the most advanced technology with unskilled labour. This is most prevalent in industries with the highest rates of technological innovation, because

> "Even if automation appears to be the lowest cost alternative, it will not be used unless management is sure that it can recover the heavy investment through a long period of production of the same product with the same process.. The use of manual processing in semi-conductor production is important to producers who supply a rapidly changing market characterised by

new technology, product innovation and swift obsolescence of products..." (Moxon 1974: 48-49)

"Manufacturers state that such rapid changes in the market discourage economical automation of product lines; automation would -

(1) tend to prevent product innovation because of the investment required and

(2) slow the advance of technology vital to maintaining their competitive position with regard to imports." (US Tariff Commission cited in Kreye, 1977: 54)

When it comes to choosing between competing sites in different Third World countries,

"The most important consideration from the viewpoint of the individual firm is political stability... In addition to an assessment of political stability, the most important factors influencing location are labour costs, transport costs, access to and knowledge of the export market, and satisfactory tariff arrangements within these markets. " (Currie 1979: 21,25)

Despite their different interpretations, the critics all agreed that transnational corporations are the major force behind the rapid industrialisation of the NICs, not local capital. They also concur that the bulk of the investment by transnationals has been to relocate production to the NICs while continuing to sell to established markets in the Western world.

According to the Bureau of Industry Economics,

"The developments in Asia reflect increasing trade specialisation and the operation of multinational firms in a dynamic environment. The relative abundance of labour in Asia, combined with attractive investment incentives has provided a basis for large scale investment in the region." (BIE, 1978: 4)

Though cheap labour is the major incentive,

"The developing Asian economies are attractive for offshore investment for reasons additional to the availability of relatively low priced labour. Most of the countries offer a generous set of incentives for the establishment of industries (eg. company tax holidays, industrial estates and resource processing zones), a disciplined labour force with a good standard of basic education, infrastructure facilities geared for export and easier access to the European, American and Australian markets by means of developing country preferences." (BIE, 1978: 8)

The Bureau sees two main forms of redeployment.

"One key form is the establishment of a factory in Asia which will export its products back to the Australian market. This is often associated with a scaling down of Australian production. Another kind of redeployment arises where production costs are satisfactory for the supply of the domestic market, but are too high for the realisation of export potential. In this case export capacity is redeployed to the Asian region and the Australian operations are substantially unaffected. " (BIE, 1978: 8)

The "devotees" normally express the magnitude of this relocation in terms of effect upon countries and groups of countries. Even on this scale the dimensions are impressive. The OECD's study of *The Impact of the Newly Industrialising Countries on Production and Trade in Manufactures* found that -

"The aggregate share of the NICs[2] in total OECD imports of manufactures has increased continuously between 1963 and 1973, with a marked acceleration in the early 70s...

Altogether, the NICs share.. .increased by 5½ percentage points, from 2.6% in 1963 to 8.1% in l977." (OECD, 1979: 6)

When the contribution of transnationals to this growth is isolated, the figures are, if anything, more impressive.

> "Investment by transnational enterprises and the expansion of intra-firm trade have been important factors, at least in some of the NICs, in determining industrial location based on comparative advantage and the product cycle... Transnational enterprises have been able to take advantage of low-cost labour, proximity to major markets, the existence of basic infrastructure and political stability by moving capital, technology, managerial and marketing skills to suitable location... transnational enterprises have undoubtedly made an important contribution to the decentralisation and fragmentation of production processes and to the development of new forms of international division of labour...

Partial information.. .on international trade between units of the same corporation, suggests that it is rapidly rising in manufactured products supplied by the developing countries and the NICs." (OECD, 1979: 33)

The OECD notes that -

> "Imports obtained on a sub-contracting basis from overseas firms which are related by ownership to the buyers amounted to 25% of manufactured imports from developing countries in 1977, under items covered by certain tariff provision." (OECD, 1979: 33, n. 2)

The main form of this intra-firm trade between developed and developing countries is

> "offshore processing, where an enterprise - usually but not necessarily transnational - uses a subsidiary or a subcontractor for carrying out a particular phase in the production process.. .An indirect indication of their expansion can be derived from statistics on off-shore processing under special tariff provisions, the tariff liability being assessed only on the value added in foreign processing and assembly. Thus, in Germany, imports under the provision rose from DM386 million in 1962 to DM2.6 billion in 1976, and in the United States, from $61 million in 1966, to $2.8 billion in 1976. Similar developments appear to have occurred in several other advanced countries." (OECD, 1979: 33)

The rate of increase for the US is truly phenomenal - a 45 fold increase in money terms, 10 fold increase in real terms, an 8 fold increase as a share of total imports, in just 10 years. According to the OECD -

"in recent years, the average annual increase of developing countries' exports to the United States benefiting from value-added tariff schemes correspond to as much as two thirds of the increase in their exports to the United States covered by the ASP." (OECD, 1979: 39)

Obviously, the special tariff provisions are an incentive for transnationals to relocate, but as the OECD cautions, they are not a sufficient explanation.

> "offshore processing under special tariff provisions does not fully account for the re-location of production processes by transnational enterprises. Many processing activities, including fairly important ones, do not qualify for special tariff treatment because the inputs are supplied by third countries.. .or because the share of inputs supplied by the final importing country is too small." (OECD, 1979: 34

If 25% of imports from all developing countries were intra-firm, then the proportion of intra-firm imports from NICs, where the relocation process is concentrated, would be substantially higher. Likewise, if 2/3rds of the growth of total developing country exports to the USA was intra-firm trade, then the growth rate from NICs would be higher still. It is clear that intra-firm trade, based on the relocation of production by transnationals, is the fastest growing facet of international trade, and with that growth will come a new structure to production. It will be one in which, to quote Ho Kwon Ping,

> "The international division of labour will be truly 'internationalised'. In the classical scheme, nations produced and traded finished goods on the basis of comparative advantage. In the new system, production and trade are no longer nationally defined, but fragmented into a number if partial operations scattered across a 'global, interdependent economy' governed by supra-national corporation structures". (Ho, 18/5/79: 77)

Clearly, this change from a system of production based on the nation-state, to one based on the transitional corporation, has major implications for the level and distribution of economic prosperity across the globe. Unfortunately, our two sets of critics, for different reasons, provide little if any guidance as to what these implications are.

The " detractors" leave little doubt as to what they think the "Global Factory" and "Global Shopping Centre" portend - but they can provide no proof stronger than analogy. Garnet and Muller (writing in 1974) again put the case against

> "to understand the impact of the global corporation on the majority of the people of the United States, we need to recall the principal elements of the global transformation.. in the first place.. the new corporate structure is the culmination of a process of concentration and internationalisation that has put the world economy under the substantial control of a few hundred business enterprises which do not compete with one another according to the traditional rules of the classic market.
>
> Second, the interests of these enterprises is global profit maximisation which may... require profit minimisation in certain countries under certain circumstances...
>
> Third, the poor nations of Asia, Latin America and soon, Africa, long the hewers of wood and drawers of water for the international economy, are increasingly becoming the principal sites of new production. This dramatic shift from north to south, which could not have been predicted even ten years ago, is changing employment patterns and living standards in the United States...
>
> We shall be looking specifically at the effects on the United States of the re-organisation of the world economy into a Global Shopping Center and a Global Factory..., at three sorts of changes in American society which.. .have the effect of changing the pattern of production, the distribution of income and the balance of power within American society to increase its resemblance to an underdeveloped country.
>
> In the interests of the maximum global profits, the managers of the world corporation are creating, often unconsciously, a global system in which the long term role assigned to the United States is completely changing what it produces and consequently what its people do. Production of the traditional industrial goods that have been the mainstay of the US economy is being transferred from $4 an hour factories in New England to 30 cents an hour

> factories in the 'export platforms' of Hong Kong and Taiwan. Increasingly, as the cars, TVs, computers, cameras, clothes and furniture are being produced abroad, the United States is becoming a service economy and a producer of plans, programs and ideas for others to execute. The effect is to eliminate traditional jobs on the assembly line and thereby reduce the blue collar workforce and to replace these jobs with others (probably a smaller number) requiring quite different skills. Because people are not fungible, unemployment and reduced income result.. The change in employment patterns has led to a redistribution of wealth and income which, once again, is more in the tradition of the underdeveloped world than that of the Affluent Society. " (Barnet & Muller, 1974: 213-216)

Unfortunately, to be more definitive about where the "Transnational Production Show", sequel to the "International Trade Show", is leading the world economy, our critics need a plot to which even the script writer must conform. But they have already decided that the transnational has abolished the plot - the market - so that the final outcome (whether there are more jobs or less, higher wages or lower, higher profits or lower) cannot be predicted. So much research is reduced in the end to "probably"'s and analogies.

The "devotees" have erred on the other side. Having witnessed a process which has largely transformed international trade into one form of intra-corporate dealings, they continue to dress the intracorporate phenomena in modified international clothing. Thus the OECD believes that

> "Broadly speaking, the factors which determine changes in comparative advantage, combined with the working out of the product cycle and inter-nationalisation of production processes, provide a plausible framework for interpreting changes in the pattern of world production and trade since the war...
>
> Traditionally, industries have been classified according to their labour or capital intensity, and the less developed countries have been expected to have a clear comparative advantage in typical labour-intensive industries.. But this traditional simple model of comparative advantage.. .has proved increasingly less satisfactory... To provide a fuller explanation, two main approaches have been developed.
>
> First, the concept of factor endowment has been extended beyond capital and labour to include natural resources and such factors as entrepreneurial managerial and commercial skills. Further, technological innovation, in which the advanced industrial countries have an overwhelming comparative advantage.. .has played a significant role in determining industrial location and trade flows.
>
> Second, the product cycle approach has been combined with comparative costs to explain the composition and direction of trade as a dynamic phenomenon... Broadly speaking, new products (and processes) are first developed in the technologically advanced countries which dispose of scientific and engineering skills. With mass production, technology becomes standardised and is diffused to intermediate countries where capital has become more abundant and cheaper and skills have been ungraded.. .There is thus a continuous renewal of the product cycle, with advanced countries losing the lead in some products and moving on to more sophisticated lines, thus making room for the NICs to step in... " (OECD, 1979: 132-136)

This is a world where "countries" develop "new products (and processes)" - not companies; where "technology" as it cheapens gradually "diffuses" from one country to another - not where firms hold industrial patents and establish production under those patents where it best suits them; where countries use their own capital "which has become more abundant and cheaper" to establish new industries - not where firms who have developed a new product use their corporate capital to establish a factory in the best location. The Emperor's sleek skin shows through the holes in the awkward garment, but it is the tailors who look silly, not the Emperor.

The Bureau of Industry Economics provides some acknowledgment of the inability of conventional analysis to explain developments in the NICs in its evaluation of its own model of international trade, which was based upon comparative advantage but modified to include "human capital", natural resources and the effects of protection. The Bureau concluded that

> "The statistical analysis described in the previous section shows that the trade flows between Australia and developing Asian countries can be explained only to a limited extent by references to differences in basic factor endowments.. The results show that import competition from Asian countries is likely to be less important for those industries which make extensive use of skilled labour in their production. While neither of these findings is surprising, it might have been expected that Australia's export performance would be more closely related to the relative capital intensity of industries. This approach appears to have been true for the year 1975-75, and even then the results are not ambiguous." (BIE, 1978: 51)

The BIE displays considerably more perception that the OECD when it assesses the failure of this model to "fit the facts" of South East Asian industrialisation.

> "The conventional theoretical model would suggest that the Asian developing economies would not have a comparative advantage in capital intensive goods. Rather, they would give priority to labour intensive manufactures. However an important qualification to this view is that we observe foreign direct investment from the developed countries in a range of capital intensive industries in developing countries. This foreign investment is often attracted by investment incentives, tax holidays and other fiscal and protective devices. It is not uncommon for such industries to channel a significant proportion of their production towards export markets." (BIE, 1978: 51)

To get a better idea of what the relocation of production by a transnational will mean, we have to leave our "critics" behind and look at it from the point of view of the "scriptwriter". This requires a theory which can content with the existence of transnational corporations, which neo-classical economics, the theory of our devotees, cannot; yet which realises that transnational corporations are subject to a marker of their own creation, something the detractors cannot comprehend. The theory is Post-Keynesian economics.

The details of the model can best be sketched with a hypothetical example of relocation. Take an American transnational producing a product for the mass consumption market (say pocket cameras). It sells in the American and Australian markets, with an American factory supplying the American market and an Australian factory supplying the Australian market. It is expanding production in both economies to maintain a constant share of the pocket camera market. This growth is financed out of retained earnings (undistributed profits), with undistributed profits from the American operation financing American expansion, and undistributed profits from the Australian operation financing Australian expansion.

Distributed profits accrue to the American shareholders, and distributed profits from the Australian operation are remitted to America.

Having looked at all available investment options, the firm decides to establish a factory in a Third World country which is pursuing Export-Oriented-Industrialisation (say Malaysia), and export the products back to the American and Australian markets. When the new factory goes on line, the Australian and American factories will be closed down - this is the first of the key forms of relocation cited by the Bureau of Industry Economics, "the establishment of a factory in Asia which will export its products back to the Australian (and American) market" (BIE, 1978: 51).

The capital machinery needed for the new factory will be produced in America and shipped to a new subsidiary in Malaysia.

The first step in implementing this policy is to let contracts for the construction of the required capital goods in America. Since this amounts to an entire new factory to replace the output of two factories, this significantly boosts the production of the capital goods sector. This boost is partially offset by a decrease in production for the domestic market, since the firm is letting its American factory run down.

Australia suffers doubly at this stage. Firstly, as with America there is a decrease in the production of capital goods as the factory is allowed to run down. Secondly, profits which were once retained to expand local production are no longer needed for this purpose: they are repatriated to America to help finance the new plant.

America records an "export" on its balance of trade when the capital goods are shipped to Malaysia, but this is a paper gain since they were paid for by the American company and simply shipped to its Malaysian subsidiary. Malaysia's net investment is limited to infrastructure and related investments.

When the Malaysian factory commences production, the factories in America and Australia are closed down; manufacturing workers are laid off; the balances of trade for America and Australia are worsened as both import goods they once produced themselves. Malaysia gains on the balance of trade, through this may by limited by transfer pricing and the use of imported raw materials.

The object of the move was to sell the same quantity of pocket cameras (as planned) at the same price (as planned), but to produce them at lower cost. This would have increased both the rate of profit and the absolute amount of profit earned. With the total wage bill in Malaysia being at most a tenth of the company's previous wage bill, and capital costs being significantly lower,[3] the latter half of the object has been achieved. Whether the former half can be achieved - selling the planned quantity at the planned price - depends on the impact of the relocation on the spending power of the American and Australian markets.

The example enables us to construct a "balance sheet" of the effects of the relocation on the three economies involved, but cannot provide a determinate conclusion about the overall effects of the relocation on the global market.

One can conclude from the example and the following Table that the effect of the relocation on Malaysia is positive overall. The net size of the benefit cannot be determined, and depends on a number of variables not specified in the example: the method of wage determination (specifically whether the agricultural sector or industrial sector takes the lead), the amount of local infrastructure built by local capitalists, the "opportunity costs" of budgetary allocations by the Malaysian government, the use of foreign raw materials, and transfer pricing by the transnational.

RELOCATION BALANCE SHEET			
SECTOR/VARIABLE	AMERICA	AUSTRALIA	MALAYSIA

CONSUMPTION SECTOR	Local production	Negative	Negative	n/a
	Export production	n/a	n/a	Positive
INVESTMENT SECTOR	Local production	Negative	n/a	Positive
	Export production	Positive	n/a	Positive
EMPLOYMENT	Cons. sector	Negative	Negative	n/a
	Invest. sector	Positive	Negative	Positive
TRADE BALANCE	Cons. sector	Negative	n/a	Negative
	Invest. sector	Positive	n/a	Negative
PAYMENTS BALANCE	Investments	Negative	n/a	Positive
	Profit repat.	Positive	Negative	Negative

There are no equivocations for the Australian economy. On every variable, the net effect has been negative. Capital goods which used to be constructed to maintain and expand local production are no longer produced; manufacturing workers have been laid off; the balance of trade has been worsened; the repatriation of profits has increased dramatically. The transnational will make greater profits in Australia than before (because cost of production have been cut substantially), but these will be based on a lower than expected level of sales, because the relocation has partly undercut the affluence of the market it is selling to.

The example as a whole is indeterminate because equivocations abound for the American economy. The transnational directly reduced employment in the consumption sector by laying off its employees, but it directly increased employment in the investment sector by letting the contract to build its Malaysian factory. These net workers will spend most of their income on consumption, indirectly creating employment in the consumption sector; the net effect could go either way. Production of capital goods for domestic investment has gone down, but production for export is up; again the net effect can't be predicted. The balance of trade is worsened, but balance of payments improved dramatically by vastly increased repatriation of profits from Australia.

The Post-Keynesian framework is the only theoretical method capable of coming to terms with trade under a regime of transnational corporations, and hence predicting what the impact of the relocation of production by transnationals will be on the world economy. The model developed in the next section is a first step towards providing such a theory.

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[1] This is a paper which has lived in the "bottom drawer" for some years, hence the age of the references. The statistics and analysis are nevertheless still relevant; however while the Golden Age analysis undertaken in the Appendix is still valid, I would today endeavour to provide a dynamical systems analysis of this issue.

[2] The OECD's list of "Newly Industrialising Countries" is: Spain, Portugal, Greece, Yugoslavia, Brazil, Mexico, Hong Kong, Taiwan, Korea, Singapore. Most would add Malaysia, Thailand and the Philippines to this list, and some would question the inclusion of Yugoslavia.

[3] Wages in Malaysia are less than a tenth of those ruling in America and Australia, and in a wide range of industries Malaysian productivity is comparable to American and Australian productivity. The capital will cost less per unit of output because the latest technology is being used, many sunk capital costs are met by the Malaysian government, and the plant does not require the expensive environmental protection equipment needed in the West.