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**SWP 30/87 JAPANESE TROJAN PONIES:
LESSONS FOR THE EUROPEAN AUTOMOBILE
INDUSTRY FROM THE UNITED STATES**



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ABSTRACT

JAPANESE TROJAN PONIES: LESSONS FOR THE EUROPEAN AUTOMOBILE INDUSTRY FROM THE UNITED STATES

This paper reviews the three strategic stages of Japanese automobile manufacturers' strategy within the United States, and, from this, forecasts likely developments within a European context. It considers the implications of future Japanese initiatives from three perspectives - that of the European automobile competitors, of national Governments, and of the wider E.E.C. federation.

JAPANESE TROJAN PONIES:
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INDUSTRY FROM THE UNITED STATES

One of the most important development in the globalisation of world trade in the last 15 years has been the expansion of the Japanese into North American and European markets. Within this, the growth of the Japanese in the automobile industry has been amongst the most dramatic. In 1970 Japan produced 3 million cars with less than 700,000 exported: by 1985, production in Japan had grown to over 7.5 million with 4.5 million units exported. This growth has impacted powerfully upon world trade, with imports of Japanese cars, trucks, and components accounting for over half of the current \$ 40 b. U.S. trade deficit with Japan.

We believe that Japanese strategy in the U.S. provides a significant condition of "deja vu" for Europe. This article therefore analyses the stages of Japanese implantation in North America and forecasts likely developments in Europe based on the U.S. model. Finally the implications of the Japanese moves for the European automobile industry, national Governments, and the E.E.C. will be evaluated.

THE JAPANESE IN NORTH AMERICA

The Japanese penetration of the North American car market has passed through three clear phases.

Phase I: Exports from a Japanese Base. (<1980)

The first stage of Japanese strategic implementation has been to export directly - Japanese sales in the U.S. remained

below 5% of the market until the early 1970's. From then on, the rapid changes in market structure resulting from the oil crisis and the consumer demand for smaller cars, resulted in a marked increase in Japanese market share - up to 20% by 1980. The protectionist protests from the U.S. automobile industry led to the institution of the Voluntary Restraint Agreement (VRA) in 1981 which imposed limits on imports for a three year period.

Phase II : Stepping Stones. (1980 - 1985)

This resultant constraint of VRA caused a Japanese re-evaluation of the basic economics of automobile production. Given that the U.S. automotive union environment and supplier industry structure were unfamiliar and more costly per unit than in Japan, low volume manufacture in the U.S.A. appeared an unattractive option but inevitable to avoid more extreme protectionist measures. Honda took the first step in 1985 with a small assembly plant in Ohio, followed by Nissan's truck assembly plant in Tennessee.

The big three U.S. automobile manufacturers were also forced to reassess their strategy. In the previous decade all three had taken minority equity positions in Japanese car companies although their much smaller partners were not considered to be particularly threatening. Increasingly however, the U.S. companies looked towards their Japanese partners for low cost components and began to "badge" Japanese small cars for the U.S. market. At the same time, U.S. manufacturers began "crash" internal programmes in an attempt to produce small cars at Japanese cost levels (GM Saturn; Ford Alpha; Chrysler Liberty).

In order to effect technological transfer of the Japanese manufacturing process, joint ventures were established to produce small cars in the U.S.A. The first of these was

that of General Motors and Toyota, which was not linked financially, rapidly followed by Ford and Chrysler with their equity partners, Mazda and Mitsubishi.

The joint venture partners had very different objectives. The Japanese saw a low risk, low investment "stepping stone" into the protected and unfamiliar U.S. market: the occidental companies saw a "stepping stone" to catching up with Japanese manufacturing technology to be applied later to their own internal programmes. Neither partner had a long term commitment to continue.

Phase III : Implantation (1985 -)

Albeit with different time-frames, from the perspective of both nations the joint ventures should be viewed as successful. For the U.S., Japanese management methods have created unprecedented labour flexibility and low manning levels. For Japan, experience has been gained rapidly with concomitant confidence in Japanese ability to compete from a North American base. As protectionist pressures continued, together with calls for a strengthening of the Yen, Japanese companies established additional joint ventures and wholly-owned facilities despite the American government's lifting of VRA in 1984.

During 1985 plans were announced for ten additional plants in the U.S.A. as well as in Canada and Mexico, two countries which possessed preferred import status with the U.S.A. The capacities of the original facilities have also been considerably increased, and cars added to Nissan truck plant. By 1988 new Japanese capacity for over 2 million cars will be in place to supply a market of around 10 million cars.

The chronological sequence of the implementation of Japanese automobile strategy is seen in Table 1 below.

[Insert Table 1 about here]

THE JAPANESE IN EUROPE

A study of the development of the Japanese automobile implantation in Europe shows close parallels with U.S. history as far as phase I and II.

Until 1985 Japanese attention focussed mainly upon the U.S. for two reasons. Firstly, because of its great homogeneity, and secondly, because the sudden swing in demand by the American consumer towards small automobiles found a gap in the U.S. manufacturers product lines which could be filled immediately by existing Japanese products. In Europe the oil price change did not modify the market structure so radically, given that European manufacturers were already producing small automobiles.

Japanese imports into Europe have also been limited by various quotas and restraints for many years. In the U.K., a "gentlemen's agreement " exists to limit market share to 10-12%: in France and Italy, quotas limit imports to 2-3%. Germany, the largest market, has no import restrictions but, until 1985, Japanese market share was less than 10%. The result has been a slow growth in Japanese share of the total European market to 11% in 1985.

Reacting to protectionism, the Japanese have followed the same pattern of "stepping stones" joint ventures with low capacities and investment. The Nissan move in Italy and Spain, and the Honda link with Austin Rover follow this pattern. The Phase I Nissan project in the U.K. to produce

24,000 automobiles a year fell far below an economic level thus replicating the U.S. entry strategy.

Table 2 shows a comparison of developments in the two continents, North America being in Phase III of Japanese implantation at the beginning of 1986, whereas Europe was still in Phase II.

[Insert Table 2 about here]

1986 - TOWARDS PHASE III IN EUROPE?

The rapid strengthening of the Yen against the dollar in 1985, up by 40%, radically changed global economics and triggered the start of Japanese investment in Europe parallel to that of Phase III in the U.S. The economics of exporting automobiles from Japan as opposed to manufacture in North America or Europe have totally changed, favouring increased sourcing from those plants already in operation. In addition, aggressive new competition to the Japanese emanates from both Korea and Taiwan, the currencies of which have not appreciated against the U.S. dollar.

The profits of the Japanese automobile manufacturers have therefore showed a sharp decline for the first time in ten years. To date, their strategy has been to maintain market share and volume by absorbing a large part of the currency appreciation in pricing, at the expense of profitability. However, with manufacturing capacity coming on stream in North America, Japanese attention has moved to Europe where the Yen has not appreciated so strongly.

Insert Figure 1 about here

Evidence of this shift in strategic focus is demonstrated by Japanese export volumes to Europe jumping by 50% in the first half of 1986, relative to that of the previous year. The growth has been most marked in Germany where the Japanese share had been only 10-11% despite the lack of import restrictions. During 1986, the Japanese share rose rapidly to be over 15%.

Defensive Reactions:

The four major markets of Europe - Germany, France, Italy and the U.K. - account for 73% of the total European market, Germany being the largest at 25%. With Spanish and Dutch market shares approximating 5%, six countries account for over 80% of cars sold in Europe.

Italy, France and Spain impose strict quotas on Japanese automobile imports. The Netherlands has a small state-owned speciality automobile manufacturer, Volvo Car, but is so far maintaining an open door to imports. The U.K. continue to maintain a 11% quota on Japanese imports with a clear policy of encouraging Honda and Nissan to substitute automobiles built in the U.K.

Major lobbying is to be observed with growing clamour from the German car manufacturers, hurt both by declining exports to the U.S. in addition to the increase of Japanese market share of their domestic market. In September 1986 the President of Audi, Dr Habbel, expressed concern about the increased penetration by Japanese producers in the West Germany new car market. He noted that in 1981 the Japanese promised to freeze their penetration of the German market at 10%. The President of BMW, Mr Ebarhard von Keunheim, has also warned that "the Japanese importation level is close to crossing the threshold of pain". He insists that the German

motor industry would prefer that no protectionist measures be imposed because, like the Japanese industry, it exports more than half of its total output and stands to lose more than any other country should a trade war break out. (German 1985 automobile exports were worth \$28 bn. versus imports of \$6 bn).

In October 1986, the President of the German Manufacturers Association, the VDA, Hans-Erdmann Schonbeck, said it was unacceptable that cars should pour into Germany from Japan, because countries such as Italy, France, Britain, the U.S. and Canada had placed restrictions on Japanese automobile imports. Mr Schonbeck said, "I hope the Japanese will see sense. Industry in Germany has not gone to the Bonn Government for help and has no plans to do so, but we hope that the present share (of Japanese automobiles in the German market) will not rise anymore". In counterpoint, the West German Minister of Transport, Werner Dollinger, rejected all protectionist action, saying that the West German market would always stay open to the importation of automobiles. Any change in this German position would obviously alter fundamentally the official E.E.C. position.

In November 1986, senior E.E.C. officials privately met representatives of the CCMC, the automobile makers lobby group, to discuss a report calling for new and firm initiative to limit the growing penetration of the European automobile and light commercial vehicle market from low-cost Japanese manufacturers, by quotas or other protectionist actions. Further, a substantial report was presented to the European Parliament on E.E.C. - Japanese trade relations, drafted by Mr James Moorehouse, the British Tory MEP, calling for import tariffs to cut the trade deficit.

Japanese Response:

The Japanese manufacturers have strongly denied any shift from America to Europe, but MITI cautioned the industry of the fast rising level of E.E.C. exports, asking for voluntary restraint in order to head off trade friction between the E.E.C. and Japan and setting a "guideline" of a 10% unit increase over 1985. The Japanese manufacturers constrained shipments over the next few months, but in October 1986, cumulative sales were still 22% above 1985. At the same time, Nissan announced that it would advance the second stage of its manufacturing investment in the U.K., a move quickly followed by Japanese competitors as evidenced by recent statements from Toyota which also indicate a re-evaluation of their manufacturing plans in Europe.

These pressures suggest that the Japanese are now moving to Phase III in Europe - direct investment in manufacturing plants. The parallel with the 1984 Japanese strategy in the U.S. seems manifest.

Insert Figure 2 about here

IMPLICATIONS

The potential addition of new, highly efficient factories in an industry already suffering from fierce competition and a 20% over-capacity, has radical implications for automobile manufacturers, European governments, and the E.E.C.

Implications for European Automobile Manufacturers:

In the current environment of slow market growth, over-capacity, and high exit barriers, the European automobile companies will clearly lobby strongly to set limits on the imports of Japanese automobiles and to avoid additional NEW capacity being established in Europe. The takeover of some existing excess European capacity by a Japanese Company as has happened in the U.S., would be likely to be more palatable.

Whereas attention has focussed mainly upon finished automobile construction, component manufacture also faces a substantial threat. The U.S. multi-nationals already incorporate Japanese components into the cars they build in Europe and include the production in Europe of cars designed by their Japanese partners amongst their strategic options. This type of penetration is hidden and inexorable, placing companies without Japanese partners at a potential disadvantage. The European component industry will quickly face the same pressures as have occurred in the U.S.

Implications for European Governments and the E.E.C.

1. Employment.

In recent years the automobile industry has joined the four traditional problem industries - coal, steel, textiles, and shipbuilding - as a European government pre-occupation. Its importance is related to the 1.3 million people directly employed in the manufacture of automobiles in Europe, with probably twice that number in the related component industries.

The automobile industry and government are closely intertwined, with several European governments being

direct shareholders in automobile companies - Renault, Austin Rover, Alfa Romeo, Volvo Car, and SEAT. Volkswagen is 20% owned by the German Government - currently being denationalised - and 20% by the State of Lower Saxony.

The nationalised automobile companies have also been amongst the biggest loss-makers. Companies such as Renault have delayed manpower reductions long after their private sector competitors such as Peugeot, because of government pressure. In many cases the Governments have continued to pour money into the ailing companies, whilst waiting for an acceptable suitor to take the problem off their hands.

2. Finance.

Government finance is an additional critical factor in both private and publicly owned car company investment decisions. A new car component or assembly plant provides the prospect of substantial job creation and investment between \$500 - 1,000M. To attract this investment, regional and national governments have provided such a wide range of soft loans, development grants, subsidies for training, accelerated depreciation, and facilities, that no project is planned without evaluating them. European countries have competed aggressively with each other for projects. Even Daimler Benz, the most profitable of the European companies, made a decision on the location of a new plant based on subsidies estimated at \$70 million from the German state of Baden - Wurtemberg.

3. Location - the National/Multi-National Issue.

The existing European automobile manufacturers can be dichotomised in terms of freedom of action, and choice in planning the location of new investment:

- . The "national" car companies - for example, Renault, Peugeot, FIAT, VW, Austin Rover, who have commitments to their home country governments and economies.
- . The existing "multi-nationals" - Ford and General Motors, who manufacture and cross-source automobiles and components between European countries and North America, South America and the Far East. For these companies, choices of sites and other worldwide locations, are made mainly on economic grounds.

The two U.S. multinationals - Ford and G.M. - have been able to take their pick of competitive bids from many European countries when they have planned new investments. When Ford considered a new plant in 1979, not only Spain, but Belgium, U.K., France, Germany and Austria competed vigorously with grants, subsidies and soft loans for the investment, with up to one-third of the initial investment of \$500 million being offered in some form of assistance. The package offered by the French Government was fiercely protested by Renault and Peugeot.

In 1985 the U.K. Trade and Industry Secretary, Norman Tebbit, sought assurances from the German Government that Ford was not being given unfair advantages to sway their choice of location of a new \$200M engine plant between Dagenham and Cologne. The plant was eventually set up in the U.K.

G.M.'s \$1.5 billion investments in new car and components plants in Spain, and in a \$500 million engine and transmission plant in Austria have also been one-third subsidised by government and regional assistance.

In competing for investment, governments have generally been concerned with short-term employment or job creation issues many of which may have negative long term effects upon the competitiveness of their own domestic automobile manufacturers.

The Japanese companies, particularly Nissan, Toyota and Honda, are rapidly changing from "national" to "multi-national" companies in terms of investment strategies, learning the art of maximising government grants, both in the U.S. and Europe, by "playing off" one government against another.

The links of various Japanese companies with the U.S. car companies further complicates the situation with both Ford and G.M. assembling Japanese commercial vehicles in Europe and using Japanese components.

EUROPEAN DILEMMAS

European governments are clearly undecided as to whether the Japanese are merely new players in the existing game, or whether their entry fundamentally changes the rules. In addition to trying to decide how to deal with the increasing volumes of direct automobile imports which are an important component of the E.E.C. trade deficit with Japan, Europe is faced increasingly with two inter-related problems:

- . Whether to take a nationalistic or community approach to attracting Japanese manufacturing investment and joint ventures.
- . How to treat the "transplants" - Japanese automobiles assembled in another E.E.C. country, but using components imported from Japan.

Direct Investment and Joint-Ventures:

To date, direct investment by the Japanese in automobile manufacture has been small. As an example, Nissan has been the most adventurous investing £50M in the first stage of its U.K. plant and creating 470 jobs. The second stage will cost £330M. (£100M from the U.K. government) and employ an additional 2,200 people. Nissan has also taken an increased shareholding in the Spanish truck company - Motor Iberica.

Nissan's Italian initiative with Alfa-Romeo appeared doomed from the start by the Italian governments adoption of an ethnocentric stance, and by limiting production to 60,000 units a year.

In the U.K. the British Government has adopted a more positive approach by encouraging Honda - Rover co-operation and would probably welcome a direct Japanese shareholding in return for increased levels of employment. Mrs Thatcher has also directly solicited and encouraged the Nissan investment, although these policies are in many ways inconsistent with the rejection of the Ford bid for Austin Rover, and the General Motors bid for Leyland Trucks.

Both U.S. and European automobile manufacturers have claimed that the incentives offered to Japanese manufacturers place the newcomers at an advantage to existing operations. The Japanese have also been able to negotiate union agreements which are better in terms of wage contracts and job flexibility than traditional practice. Finally, in setting

up green-field operations, a younger work force has been hired, with a lesser pension burden upon the company. Ironically, it should be noted that all claims are equally valid for new Ford and G.M. investments in other countries!

True additional long term job creation is also highly debatable in an industry demonstrating over-capacity, since each generation of investment is claimed to employ fewer people. Ford state that for every job created by Nissan in the U.K., two will be lost at other U.K. car-making facilities since Japanese plants generally have manning levels at 50% of their U.S. or European equivalents.

At the European Community level, Mr Willy de Clercq, the European Commissioner responsible for External Trade has warned E.E.C. member against using "beggar-my-neighbour" competitive State subsidies to attract Japanese investment. The European Parliament has requested the Commission to draw up common guide-lines for all member States on the value-added, local content, and use of State aids relating to Japanese investments in the Community. The Commission's belief is that the huge deficit in trade between the Community and Japan should be tackled not by imposing limits on Japanese exports to the Community, but by increasing European exports to Japan.

Transplants.

European governments are also divided on how to handle "transplants" - Japanese operations setting up in Europe. Most of the debate centres on the proportion of local content, 80% being considered politically acceptable. Indeed, Mrs Thatcher has spoken proudly of the 80% local content level planned for the second stage Nissan project. However, the calculation of local content generally includes not only assembly and all associated overheads, but also

marketing and other administrative expenses. It is therefore fairly easy to reach 70-80% "local content" whilst still importing the high technology components such as engines, transmissions and electronics - the high value-added items.

In response, Ford has mounted a campaign to have local content measured on ex-factory cost, rather than price. Others have proposed that the percentage be measured by weight, thus encompassing engine and transmissions units.

Once again, the parallel of the U.S. is apposite. When the Japanese have set up operations in the U.S.A. the first components sourced locally were bulky and lower technology items such as seats, trim rubber, and glass. There existed a clear strategy to retain high value-added core components, involving advanced manufacturing technologies in Japan and concern arose in the U.S. that this trend was harmful to that country's long term technological base. (Reich & Mankin, "Joint Ventures with Japan give away our future". HBR, March 1986). It could be argued that the U.S. automobile industry may be losing fundamental design and manufacturing skills, which may not be possible to recover.

Not surprisingly, the first joint ventures set up in the U.K. as part of the Nissan project have involved seats, exhaust pipes, and interior trim! Austin Rover fought long and hard with the U.K. Government to retain engine design and manufacture for future Honda-Rover projects. This may be less effective from a unit cost viewpoint, but once engineering groups are disbanded, technology can be lost for ever.

SUMMARY AND CONCLUSIONS

Japanese implantation in North America has passed through three phases, triggered by increasingly protectionist lobbying by the domestic automobile manufacturers. Europe has not yet reached Phase III, but the changed Yen/\$ exchange rate has resulted in a sudden increase in Japanese imports and increasing pressure for protectionism, particularly from the German industry.

The Japanese are reacting as they did in North America, with direct investment in manufacturing facilities. The European car companies will lobby against this because of the current over-capacity situation and vote for protectionism.

European governments are highly concerned because of employment implications. However, protectionist mechanisms such as quotas, tariffs and subsidies have been shown to be expensive ways of saving jobs in industries such as steel, coal and textiles.

The European governments are already competing with each other over the two U.S. multinations - Ford and G.M. The Japanese will operate in the same way as they move into Europe. Is competitive bidding of subsidies the most efficient way of allocating resources, or should the E.E.C. co-ordinate activity? Recent history of inter-European co-operation makes this unlikely.

As the Japanese move to direct manufacturing investment they will tend to manufacture locally the lower technology components, and continue to import directly high value-added components such as engines, transmissions and electronics. Control of this by "local content" mechanisms is difficult and ineffective.

European automobile manufacturers and governments should strive for technology transfer, using joint ventures, license agreements or other incentives in order to learn from the U.S. parallel. They should remember the lessons from historical precedent. From more than two thousand years ago came the caveat "beware the Greeks bearing gifts" - the example of the Trojan Horse being particularly apposite today. In 1986, the Japanese presence in Europe has reached the size of a "Trojan pony": the time has come to return the gift with firmness and diplomacy

TABLE 1

JAPANESE IMPLANTATION IN THE AUTO INDUSTRY

Phase 1: <1980 Exports	Rapid increase in Japanese import share
	Protectionism
	Quotas, Japanese "voluntary restraint"
Phase II: 1980-85 "The Stepping Stones"	First small Japanese manufacturing plants and "stepping stone" joint ventures.
	Additional manufacturing and joint ventures in neighbouring countries with preferred status to get around quotas.
Phase III: 1985 Local Manufacture	Greatly increased independent Japanese investment as confidence grows. Initial low capacities increased.
	Japanese component suppliers follow.

TABLE 2**JAPANESE IMPLANTATION IN NORTH AMERICA & EUROPE UP TO 1986**

Phase	U.S.A.	Europe
I : Exports from a Japanese Base		
Rapid increase in Japanese import share	Japanese share of U.S. market: 10% : 1977 20% : 1980	Japanese share of total European market: 10% : 1983 15% : 1987(estimate) 20% : 1989(estimate)
Protectionism, quotas, "voluntary restraint"	VRA : 1981-84 "restraint" 1985-86	Quotas in France, Italy "VRA" in U.K.
II : The Stepping Stones		
First small Japanese manufacturing projects and j.v.	Honda Marysville: 1983 Nissan Smyrna: 1983 (trucks) GM-Toyota NUMMI: 1984 Toyota Fremont: 1984 Mitsubishi-Chrysler: 1984	Nissan - Alfa Romeo 1980 AR - Honda : : Ballade 1979 : XX 1981 : YY 1985 Nissan U.K. Phase I: 1984
Japanese manufacturing & j.v. in neighbouring countries with preferred import status to circumnavigate quotas	Ford-Mazda-Mexico: 1984 Honda, Canada: 1985 Toyota, Canada: 1985 Hyundai, Canada: 1985 Kia, Canada: 1985	Nissan-Motor Iberica 1980 Toyota - Portugal Suzuki - Spain - Eire 1986