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THE STATE AND REGIONAL INSTITUTIONS

IN AGRICULTURE

by
John D. Lillard
The World Bank
Washington, D.C.
1971

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YIHOK

Table of Contents

| | | |
|---|--|---------|
| A | Introduction | page 1 |
| B | The calculation of strength of steel in compression under alternating loadings | page 3 |
| C | Approximate equivalent factors for the calculation of strength of steel | page 5 |
| D | The effect of various factors in industry structures | page 9 |
| E | Classification of type of compress. | page 14 |
| F | Properties of materials | page 16 |
| G | The effect of operating conditions on strength | page 23 |
| H | Conclusion - methods of computation | page 45 |
| J | Conclusion | page 31 |

1. INTRODUCTION

1. This paper describes a case study of a small company, called "A", which is located in Taiwan, and its experience in applying the ISO 9000 series of quality management standards. The author is a consultant who has been involved in the development of quality management systems in Taiwan since 1984. This paper is based on the author's experience in helping the company to implement ISO 9002.
2. The company, A, is a small-scale manufacturer of electronic components, mainly printed circuit boards, connectors, and switches. It has been in operation for about 12 years, and it has a turnover of approximately 12 million US dollars per year. The company has 120 employees, and it is located in a relatively quiet area of northern Taiwan.
3. The company was established in 1984 by a local entrepreneur, Mr. Chen Liang-Dong, a native of Taiwan. A year later, he joined forces with his brother, Mr. Chen Liang-Yuan, to form a partnership. They have been in business together ever since, and they now run the company. Their company is called "A", and it is a family-owned business. The company's main products are electronic components, such as connectors, switches, and so on.

卷之三

Chlorophyll a, b, c and carotenoids in leaves, stems, A. strigosa and C. vulgaris, during winter and spring, 1966-1967. In France, U.S.A.

It is interesting to note that the two groups of patients had similar mean ages at the time of diagnosis.

卷之三十一

—THE PRACTICAL USE OF THE COMPUTER IN THE FIELD OF THE LAW

Journal of Clinical Endocrinology and Metabolism, Vol. 100, No. 3, March 1993, pp. 899–904.

卷之三

For example, if you put \$100,000 into a trust approximately . . .

Strengths, and by the field units, including
Strengths, and by the field units, including

16.

三

Indirect links are often called client links, see.

卷之三

On March 1, 1945, the practice of the law at last became

AN EXPLORATION OF THE RELATIONSHIP BETWEEN THE PRACTICE OF YOGA AND THE RELATIONSHIP

What is the best way to get rid of country?

Instructional methods of teaching and learning to take place are implied by

In addition to the above, the following may be required:

(a) A detailed description of the proposed project.

1. It is recommended that the following be included:

(a) Detailed description of the proposed project.

(b) Detailed description of the proposed project.

(c) Detailed description of the proposed project.

The following may be required:

(a) Detailed description of the proposed project.

(b) Detailed description of the proposed project.

(c) Detailed description of the proposed project.

It is recommended that the following be included:

(a) Detailed description of the proposed project.

(b) Detailed description of the proposed project.

(c) Detailed description of the proposed project.

(d) Detailed description of the proposed project.

2. The subject of the letter may consist of one or more of the points below. In addition, the subject may consist of one or more of the points below.

(a) Detailed description of the proposed project.

(b) Detailed description of the proposed project.

3. The subject of the letter may consist of one or more of the points below. In addition, the subject may consist of one or more of the points below.

(a) Detailed description of the proposed project.

put up processes which are very much more appropriate to plants of certain size only in the short term (inflationary). It makes no sense against a factory cost (or a fixed sum) to buy large amounts of raw materials or intermediate goods from distant countries at great cost, especially if you do it, as appears to be done, mainly through intermediaries in transit cities. It is much better to buy what you need at home, at home return / import time plus up till you get the profits as similar a lot of national production with some additional. In the long run a national industry is likely to will struggle to fit to not the best alternative of import protected imports versus a new green plant. A new country in the world can not afford to will the same amount of raw materials successfully in order to encourage others to follow and reinforce its process towards industrialization.

2. The quest for industrial securities largely in timing and the key problem is whether the industry will be or not have to be developed prematurely. In general, it is probably necessary to say that most other industries, by reason of the early commercial developments, will be late. This puts the focus on the conditions under which one can expect to succeed, and it is normally the result of protection in some or other form - fiscal or commercial creation. Further lines will be drawn on this point at a later stage.

3. In the context of the present subject - auto chemicals there is in fact likely to be more demand - even in a post-war period - in industry and a potential automotive industry to sustain the national government and the prospective investment firm. This position arises because almost there are immovable factors in controlling the single factor in industry and primary. For a host of reasons steel is far critical for automobile than for rubber products.

The cost and quality of investment is a major effect on economy.
The most important factor is the cost of capital, which is the amount of money invested in the project. The cost of capital is determined by the type of investment, the risk involved, and the time period.

The cost of capital is the interest rate charged by the bank or investment company to finance the project. A higher interest rate means higher costs, which can lead to lower profits and slower growth. It is also important to consider the risk involved in the project. Higher risk projects require higher interest rates to compensate for the increased risk. In addition, the cost of capital is influenced by the time period over which the investment is made. Long-term investments typically have higher interest rates than short-term investments. This is because long-term investments involve more uncertainty and risk, and therefore require a higher return to attract investors.

ASPECTS OF INVESTMENT DECISIONS IN THE ECONOMY

- It is important to understand the factors that relate to standard of living and quality of life. Factors such as education, health care, infrastructure, and environment play a crucial role in determining the quality of life. Education is essential for economic development and social mobility. Health care is critical for maintaining a healthy population and reducing healthcare costs. Infrastructure, including transportation, energy, and water supply, is essential for economic growth and development. Environment is important for sustainable development and protecting natural resources.

the options available to the industrial countries in dealing with the present economic situation, and to all the countries concerned with the problem.

1. The right to collect rents of agricultural land may be similarly granted to
farmers and to their families. It can either be granted as a right, i.e. to
the farmer, or it can be granted to the family. This would make it more
secure, and it would also mean that the right would be for all members of the
family. It is important to collect rents of agricultural land and all
members of the family should be able to claim it.

2. The rental of urban property should be restricted to the valley
and its tributaries. Thus, status quo ante. It is a recent history that
valley people have established themselves in the cities.
For example, the people of the valley are migrating to the city, but not to the
city particularly as a result of the valley's agriculture, which is still
dominant there. In the valley there is agriculture, so why should it
not settle in the valley? Opportunities are available in the middle-class families.
University-educated people from the valley, or middle-class people from the
valley. And they are abusing the system. They are abusing the system
and they are abusing the law. They do not even care about the law, they usually apply equity
in situations with other people. So our society is not good. We have to change the
situation. The people who have been in the valley will be more difficult to
convince than others. They are used to the way of life, and will be more
difficult to change.

By — — — — —

1. The first step is to determine the material to be used in the construction of the bridge. This will depend on the type of bridge, its size, and the available materials. Some common materials used in bridge construction include:

 - Concrete: A strong and durable material that can withstand heavy loads and is relatively inexpensive.
 - Steel: A strong and flexible material that can be easily shaped and welded.
 - Timber: A natural material that is strong and durable, but may be susceptible to decay and insect damage.

2. Once the material has been determined, the next step is to design the bridge. This involves creating a plan that specifies the dimensions, weight capacity, and other key features of the bridge. The design should take into account factors such as:

 - The intended purpose of the bridge (e.g., pedestrian, vehicle, or both).
 - The location of the bridge, including the terrain and weather conditions.
 - The expected load capacity of the bridge, including the weight of vehicles and people.
 - The anticipated lifespan of the bridge, including maintenance requirements.

3. After the design is finalized, the next step is to build the bridge. This involves:

 - Gathering materials and equipment needed for construction.
 - Preparing the site by clearing debris and leveling the ground.
 - Constructing the foundation, which is typically made of concrete or steel.
 - Building the bridge deck, which is the top surface of the bridge.
 - Adding railings and other safety features.
 - Testing the bridge to ensure it meets all safety standards.

4. Finally, the bridge is inspected and certified as safe for use. This involves:

 - Conducting a visual inspection of the bridge's structure.
 - Checking for any signs of damage or wear.
 - Testing the bridge's strength and stability under various load conditions.
 - Ensuring that all safety features are functioning correctly.

5. Once the bridge is certified as safe, it can be opened to traffic. This typically involves:

 - Publishing notices to inform drivers and pedestrians of the new bridge.
 - Setting up temporary traffic control measures, such as cones and signs.
 - Monitoring traffic flow and adjusting controls as needed.
 - Gradually increasing traffic volume over time until the bridge reaches its full capacity.

10/15/74

100-1000

1. Industrial areas, especially in the northern part of the country, have been developed with industrial zones, industrial parks, and industrial estates. These areas provide a favorable environment for industrial development and attract foreign investment corporations.
2. The industrial zones are well developed and modern, providing basic infrastructure, including roads, power supply, water supply, sewage disposal systems, and industrial buildings. The industrial zones also provide incentives for foreign investors, such as tax breaks, low cost of labor, and availability of skilled labor.
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10. In particular, the industrial zones are given high priority, allowing them to be developed rapidly. They are being developed as the first large-scale manufacturing centers, including food processing and textiles, to be established in a developing country.

D. MATERIAL COSTS AS A FACTOR IN INDUSTRY STRUCTURE

1. The main problem which arises from the establishment of an industry in conditions other than a normal commercial environment, can be summarised under two heads of protection and competition. In this context they will influence the consequences of the premature introduction of the industry.

2. The first consideration will usually be "protection" and the instant argument is well known and needs no repetition. There is, if anything, greater concern in the initial acceptance of it - and one wonders whether, as in some social questions, the problems of second childhood are not over-emphasized.

3. It is often overlooked that manufacturing industry generally contributes an additional which is only part of its gross output. The rubber industry ratio varies somewhat because of differences and fluctuations in the cost of its principal inputs, especially natural rubber, but tends to be somewhat below the average.

The Industry is therefore, heavily dependent on the prices of its materials. Even in the U.K. at the last Census of Production in 1950 for example, when the industry produced just over £150 million of goods, the net output was £76 million and purchases of materials for processing, packing and fuel amounted to £77½ million.

4. The basic materials of the industry are natural rubber, which will usually have to be imported, and synthetic rubber, which if available, from local production, is liable to be priced well above world levels. An indication of the magnitude of this problem is given in chart 2 where

Supplies to the United Nations territories are quoted in terms of index, comparing them with the standard world price.

- It also has been found in India that the wide breadth of products used in any different program will require - up to 7 dozen in a major operation. It is obviously better to have a standard set of materials. This can be done by a formal and systematic review with main consideration given to the increasingly standardizing forms of material (standardized syntaxics) and also the more emphasis given to simple and uniform measurement procedures. Standardization should be sound. In this case instances of substitution between types and between standard and specific may be limited if quality standards are to be preserved. This poses a particularly difficult problem for the syntactic rule because costs will go up as the number of types is required increases. While it is not a question of size, it is necessary that quality is shown to be a part of this problem in India and Australia. In small low-income countries the problem will be magnified.
- One approach to the problem of the cost of supply of materials is to be found in certain fibres such as Tree Fibres, jute or Coir or Markets like Jute-fibre-fabrics can be substituted if procurable. In practice, however, such moves in a climate of rapid technological problems, have had extremely limited success, and the resultant uncertainty can be a considerable **handicape** in making investment decisions.
- Other important materials are the chemicals, which must now be classified widely enough to include vinyl, urea in the form of urea, and the carbon blacks. Together with the jute and other materials account for 40% of the material costs of the finished product. Chemicals, while far the smallest of the type, are critical for quality and life. The reusers are becoming wider in range and increasingly

specialized. The types used in tyres include cotton, rayon, nylon, with nylon 66 and nylon 6, polyesters, fibreglass and wire. Other processing chemicals, which a relatively small part of final cost, may be very significant for quality.

3. If access to the best material is restricted, quality may be affected and there could profit, owing to the relative of material costs where it can be more economic in foreign exchange to import tyres than the materials and equipment from which to produce them.
9. Costs will further indicate if imported materials carry heavy tariff duties. If any logic is to be held out that local products will be exported, all this is considerable a serious criticism. This is, in fact, probably why some countries are wary, as I said, illustrate later on.
10. Three factors play an important part in the situation where it has been established that the minimum size of normal exists for setting up production facilities. If the market is very large and the company aims to take only a fraction of it to start with, the problem will not be critical. But it may be the case that the minimum economic factory capacity is difficult to be developed given the scale of the market, which must logically be adhered to it since volume is essential to efficient operation of production. Even though an efficient factory cannot monopolise the home market in the face of unrestricted imports from large long-established concerns following, many of which appear to be prepared to export at little or no profit.

11. There is a need for a clear understanding to be reached between the host government and the intending manufacturer as to the degree of protection which will be afforded. If the government wants the industry it will meet the needs of the situation, but may well stipulate that prices may not be raised above a certain level without consent. This is not unreasonable and my own company would look askance at any project which relied on artificially high selling prices. Isolation from competition is not part of the normal philosophy of international companies which have built up their business against powerful rivals in many fields. They are fully aware that the spirit of competition has contributed to their efficiency.
12. It must not be overlooked that such competition will, almost by definition, be technically advanced and that the local market will have become sophisticated in judging the technical merits of this type of product because of the range of imported products previously available. In these circumstances, it is not possible to offer products whose standards are inferior to those previously set by the market. As vehicles and their tyres become more specialised and sophisticated, the equipment required to produce them becomes more specific and expensive. This tends to raise the break-even point of a project.
13. If access to the market is limited to a single company, whether or not this is desirable in itself, the continuing government control of prices and marketing will be a undesirable feature since, even with basic operational staff, the balance of measures required for initial operations, the changing world situation, especially in relation to material costs and international trading conditions, will undoubtedly alter the arithmetic. This in turn is likely to vary from one type of product to another, since in the last resort the

manufacturer is concerned with protection of the value-added, within or outside administrative complexity or regulation.

14. It is an illogical assumption that the commercial situation is simply related to the numbers involved. Large numbers of firms can act with remarkable unanimity and if faced with similar adverse external conditions are likely to be forced to do so. Conversely, all the pressure required to control efficiency can be concentrated upon only one party and unless large barriers are quite unrealistic there are few places in the world where no commercial rivals will appear. It is no accident that more and more attention is being given to non-tariff barriers to trade. If several companies are introduced into a well defined and basically inadequate market situation, the effect is likely to be that of cost inflation induced by below-capacity operation and technical stagnation, to the detriment of more favourably situated overseas competitors.
15. The rubber industry in fact is characteristically a discipline of concentration. In most countries where rubber industry exists the number of tyre factories, for example, is less than five, and in many instances only one or two. Even in the large, industrialised countries the number of tyre factories is relatively small, as the chart shows.
(Chart 3).

1/10/68

A. INITIATION OF THE COMPANY

1. I would like to know what specific difficulties face the owner of a factory in the U.S. or national market. Is it being planned and being implemented? Is there a company, even if it's a small one with little money, that will start a national chain store or franchise system, even though I should note that I think the insensitivity of the lens of the market segment will make it difficult to actually try to implement them in a realistic and recognizable and profitable manner.
2. To start with some details, what is it that companies like my own undertake manufacture in the local or domestic markets? After all, the risks involved in this kind of manufacture, and the alternatives of foreign exports to the country from existing factories to overseas many obvious attractions. To some extent, one must start off and is forced to do minimal action. Finally, in the ideal world, would the standards there would be little or no local tyre manufacture. In this aspect, I shall confine the scope of this paper - instead, I would be obliged to get reports from the local manufacturing concerns.
3. In the real world, it is otherwise. This occurs a time when, for reasons I have already outlined, the governments of most countries decide that tyre manufacture is a local effort step in their economic development programmes. Initially, a concession monopoly market basis will be required, and the importers of local quality factory, which would, as already explained, strain production or production, on imports. If the new company is this in the position of having U.S. plant and a well-local manufacturing possibilities at an early stage, to avoid avoid competition and exclusion from the market as a result of parallel import by competitors.

4. That is one side of the coin, which is termed the attraction or defensive aspect of foreign investment. On the other side is the fact, about which no investor is necessarily that it looks for alternative returns on investments in less developing countries in order to compensate for the increased risks which are present compared with alternative investment opportunities abroad. Such returns, when they do materialise, and I must emphasise that sometimes they do not, are an attractive, positive inducement to undertake foreign investment.
5. The other attraction for us of investing in developing countries is longer term and more continuous, but nevertheless worth of mention. In the home market, levels of car ownership are already high, and consequently there will be saturation in the future when the growth of tyre demand will slow down. The car manufacturer, in order to maintain its sales, and it can't stand still, must seek to invest in countries whose levels of ownership of vehicles and other transport are so low that rapid growth is likely to continue for a long time.
6. Finally, it is appropriate to describe the Company's attitude towards national shareholding. First, it welcomes participation in its enterprises especially by those most closely connected with them. Its willingness to accept partners is conditioned by the existence of local capital markets, by its access to them if they exist, and by local attitudes. In many cases, where no capital markets have yet been developed, the government or other public bodies are often forced, indeed may wish, to take up a share in the equity.
7. In broad terms, the Company recognises the political and economic desirability of local participation, but invariably requires that it should

have a majority holding i.e. at least 51%. This is in order to exercise its unqualified responsibility for establishing the factory and ensuring its ultimate commercial success, which will benefit both host country and the Company. Such a holding is not necessarily a pre-condition for the setting up of a Dunlop factory: the Company has recently taken part in a venture in Iran where it has only 26% of the equity, but where it has responsibility for establishing the factory, for management and for technical assistance. Such a special arrangement does not invalidate the general proposition which is difficult to reconcile the Company's responsibility for commercial success without financial control.

V. PROJECT EVALUATION

1. Clearly, then, we are alert to all developments which bring countries to the point where national manufacture becomes a possibility. The company's resources are not unlimited, however, and if the best use is to be made of them investment decisions must be made with great care. Selecting countries for consideration is partly a matter of the size and growth of the market, and partly a matter of the investment climate. Straightforward though they may seem neither of these is in fact a simple matter, and I should now like to say something more about each of them.
2. As regards size and growth of the market, taking tyres as an example, there are two indicators we can look at - the number of vehicles in use, and the value of tyre imports, which we can assume, corresponds to the size of the market if there is no domestic manufacture and no significant re-export trade. At first sight it might seem reasonable to expect a high correlation between these two indicators, since the demand for tyres is derived from the park of vehicles in use. In practice, the degree of correlation is quite low, as the diagram

shows. (Cont'd.)

3. The reasons for this are interesting, and important for any tyre company considering potential manufacturing possibilities. One reason, of course, may be that either the vehicle parts or the tyre import figures - possibly being incorrect, because of the not infrequent difficulty that classification statistics are incomplete, or because of classification problems in the tyre import statistics. But beyond this, the composition of the model car's and of tyre imports can vary widely, with important implications for the potential market scenario. In some developing countries, for example, there are more commercial vehicles than cars in use. Since truck tyres are about ten to four or five times greater than car tyres in both weight and value, such countries can appear to have an disproportionately large tyre import when the number of vehicles is assessed simply in terms of units.

4. A situation such as this would be far from ideal for local tyre manufacture, particularly if many of the trucks are heavy special types, since local manufacture of the tyres for such vehicles is rarely a feasible proposition, least of all at the very first stage in the development of a local industry. Two countries where the value of tyre imports is very high, but for this sort of reason local manufacture of tyres is less attractive than it might seem to be, are Saudi Arabia and Kuwait. In both cases heavy, high-value special size and types of tyres required for oilfield vehicles, account for a substantial proportion of imports. The tyre company, on the contrary, when considering local manufacture possibilities, looks for markets where a large proportion of demand is for a small range of simple, standard issue sizes.

5. When measuring the size of markets, the existence of free trade areas and common markets can also be an important factor. Many developing countries now belong to such groupings, but effect to which, practically at least, is not yet clear, market to a few small smaller ones. In practice the working environments are often very complex in design and execution, and need to be carefully studied.
6. Another important point about market size is that we are just as interested in how big our share is as in the overall size, simply because it is easier to start a successful local production centre in a country where the company's products are already well known and widely accepted. Historically our activities have been orientated towards the British Commonwealth and our share of import-supplied markets tends to be highest in these countries. This means that many, though certainly not all, of our local manufacturing operations are in Commonwealth countries - Canada, New Zealand, Thailand, Zambia, Rhodesia, India, Uganda, Trinidad, and South Africa, for example, are all received Dutch investments.
7. Finally, on the question of market size, we always attach just as much importance to ~~volume~~ as to the present position. We have to do this since for reasons I have described the commencement of national manufacture is often immature in the commercial sense, and the justification for the investment decision is expected future profits rather than short-term returns. Consequently it is necessary to project projections of long demand related to growth in the vehicle park and general economic growth patterns.
8. Before leaving the question of market size, I must explain why there companies cannot be more flexible in adapting their operations to the requirements of each separate market, however small. The fundamental problem

In fact the minimum scale of efficient production, which is determined by the technical characteristics of the production plant. However, production capacity is not the only one of several important variables in the calculation since the range of the size and types is critical in relation to the limits set by economic or social size of mining plant. At today's cost of minimum output in a large factory, including land and buildings, is in the region of \$5 million. As the mining equipment accounts for 50% and the presses about \$20,000 each. In addition it is important not to overlook the need for working capital which, with the long pipeline of expensive materials, may be as much again as the fixed investment.

9. When it comes to the question of investment climate, I have time at present only some of the factors the company takes into consideration.

The attitude of the local government towards foreign investors is perhaps the most obvious. As a rule, no doubt that this is warmly welcoming, for reasons which I outlined in the first part of the paper.

10. Much more difficult to assess are the questions of political risk and transfer risk. Frequent changes of government, in themselves are not necessarily a threat since administration can continue with a surprising degree of stability against such a background. Political risk in fact refers principally to the possibility of harmful government interference in economy operations, or, in the extreme case, expropriation following the coming to power of a government hostile to foreign investment. Examples of expropriation are however, quite rare, especially outside certain sensitive sectors such as utilities, mines, banks, and export-import trade, but the risk is not one we can ignore.

* \$ = million

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P-20

Other and possibly additional factors such as strike or lockout as a result of all or part of the plant being shut down again, unfortunate entanglements with foreign buyers.

11. Another important additional risk is the risk of loss of market share. Should a competitor try to capture a larger share in a company's home territory, the company can expect to lose at least some volume since the war, so long as it is still there, the company will have to give up market share in order to defend its position.
12. The underwriting of elements includes the category "foreign market", in respect to this risk, the financing of production, raw and consumable materials of course, may be more difficult as finance will be reduced in value when currency devaluation is calculated by the local authorities as a balance of payments measure. This may place our products at a disadvantage, particularly third world countries in particular. In this case, nevertheless one has to take some account of the likely look of the balance of payments of a country in inflationary trends. Financial difficulties can arise as may not always turn out to be correct - it is to be noted that the balance of payments of a country is a factor which has to be taken into account.
13. The risks covered so far, referred to as "normal" risk, extend to external business risks with the company in account. To encounter in the free market, outside "normal" risks such as uncontrollability of company, as far as we see the risk of having to deal with technically overpriced can be controlled by research and testing procedures. Other, although less controllable, are natural risks which the company has to deal with, and to which it can put an adequate commercial response. The situation is varied due to climatic variations for example, and also to political situations such as investments in

complaints, in contrast, are concerned with possible difficulties with
or completely absent or any control, and can be valid. This leads to
a comparison of two objectives, and a third, of MAF.

14. For example, if the court is asked to rule, as in section 8,
as to the validity of a particular contract, also one which
is said to be contrary to public interest, also one which
is for an anti-social purpose, it is encouraging the practice. So far as anti-
social purposes are concerned, the procedure is for a court
to find that there is no such intent. In other words, if a court
is saying, for any reason, that a particular, anti-social contract is not
valid, then it is giving it a repudiation of its condition.

15. On the other hand, if the question is investment climate,
racing, education, or any other matters, contracts of construction
or agency, or local legislation, or any other area, a court may be asked to
find that there is no such intent. In addition, contracts
of investment, or selling the right to the structure -
availability of land, water, labour, currency, and so on,
systems, and so forth, may be asked to be declared void because
of certain reasons. One question is what would happen in a
particular case.

16. The next question is how to approach the judicial
activities of the general practitioner in construction. One of the
activities of the general practitioner is representation. One of the
functions of a solicitor is to advise, to give advice, systems
and so on, availability of labour, skill, or anything else, systems
in construction, and so on. Little difficulty arises in this particular
area. You would say, "Well, I would do this in my situation."
In practice, however, in construction, solicitors
are quite often asked to advise in certain areas in construction.
For example, in construction, there is a great deal of

- Studies &c. It is common in the training programmes arranged for our engineers and technicians facilities will be at least at most of our factories in under-developed countries. However, we usually (but not always) draw our line of influence roads or communications. I said somethin' about the provision of these services in the first half of this note. All I will say here is that undoubtedly it is the responsibility of the local authorities, which they must take seriously if they wish to attract foreign capital for investment in manufacturing industry.
16. At this stage it is usually necessary to make a preliminary contact with the government, local, to obtain confirmation that the 'Welcome' sign is indeed put up for us our industry is concerned, and to obtain more positive information as to official attitudes towards facilities available. If the response is favourable, a full-scale project study is prepared, covering, in detail all the major points - factory equipment and buildings, production costs, technical specifications, sales volumes and prices, and distribution. All this information is incorporated in a financial exercise which predicts turnover and profits for several years ahead, and estimates the investment needed to finance the operation.
17. Before reaching the final form, the study is highly refined several times via discussions in respect, equipment and selling prices before it comes as a plan of operations. A sufficient unit size will be sufficiently rewarding in respect. Negotiations with government officials can be protracted, and in all cases will be subject to confidentiality. Let me also mention the given, however, I should perhaps emphasize that no negotiations can be very protracted. In some instances in our experience they continued for several years before a decision was reached.

G. THE EFFECTS OF OPERATING CONDITIONS ON COSTS

1. Having looked at some of the background to a decision by the company to undertake local manufacture in an overseas market, I should like to turn now to the conditions under which we operate, since these illustrate a number of important points about the difficulties of the industrialization process.
 2. To those who are familiar only with conditions in industrialized areas, the extent to which supporting services and facilities are lacking in the undeveloped countries can come as a surprise. Our main plant at Birmingham in the U.K. is located in the centre of a highly industrialized area, and the production staff there are used to being able to call, at short notice, on the services of a very wide range of supporting engineering facilities. This is very different in the developing countries. Thus, if part of the machinery breaks down, it is quite likely that no replacement is available within the country. It would therefore be necessary to import one, with all the delay that involves, or to undertake our own repairs or improvisations. For this reason own-maintenance facilities, involving substantial extra cost, have to be quite extensive in the overseas factories. Beside this, interruptions to production, due to plant breakdowns can sometimes be a serious problem.
 3. Closely allied to this are the difficulties that can arise from operating in a country where the working population lacks industrial experience. Especially in the early days, when the labour force may include people who have never handled machinery before, such difficulties can lead to a slow tempo of production and an abnormally high

level of machinery requirements. We combat this by sending out a battery of experts - instructors, foremen, and specialists of all kinds, as well as the local staff. Their help is available formal, a limited time, and so, since it is company policy to challenge and train local personnel to fill positions at all levels.

4. Every country is different in the specialised sense would not be a predominant consideration. The new factory is assured of a distinctive position, and yet the sophisticated tastes of local customers must then be satisfied locally, and cannot be ignored. In fact, there may well be an irrational but strongly rooted prejudice against a locally produced product, irrespective of its technical performance. Such a reaction may require modern methods of marketing and communication as much as the more artful competitive use of these techniques.
5. Efficient distribution is one aspect of marketing which is important in developing countries, and one to which attention sometimes formulation physical obstacles. On occasion, however, non-commercial factors have also been known to intrude into this area. In one country where we were planning the manufacture of tyres the Government took a close interest in distribution. It addressed its wish that more businessmen's could become tyre dealers, and less use made of the "middlemen", companies who up till then had controlled most of the retail distribution facilities for tyres. We undertook to co-operate, and even helped a local businessman to learn how to run their new business.
6. The points I am making about operating conditions in developing countries, in conjunction with what about raw materials supplies in the first part of this paper, go a long way to explain why productivity is low and costs per unit of output relatively high in the new factories.

It is true that wage rates are lower than in the industrialized countries but that in itself does not guarantee low costs. In practice it normally takes many years to achieve a level of efficiency and cost competitiveness comparable with the older industrialized countries, which also have the added advantage of larger scale. This is reflected very clearly in the export figures : at the beginning of this paper when discussing raw material costs, I said that exports for the new factories were rare.

7. Just how rare is shown by the figures in Chart 5, for world exports of tyres in 1957 and 1967. In 1957 world tyre exports amounted to £131 million. Of that total, less than 1% was exported by the developing countries (excluding Spain and Portugal, which are sometimes classified as underdeveloped, but are hardly in the same category as the other developing countries). During the following decade at least twenty of the developing countries acquired new tyre industries, and there were substantial expansions of the industry in many others. Yet by 1967 exports of tyres by the developing countries had risen to only 2% of the total.

H. CASE STUDY - MALAYSIA

1. I have said quite a lot now about investment in developing countries in general terms. To conclude this paper, it may be helpful to illustrate by means of an actual example and I propose to give you a sketch of my company's experience in Malaysia, or Malaya as it was until 1963.

2. For many years we carried on with that country a substantial export trade from the United Kingdom, principally in tyres. In addition, we have owned extensive plantation interests in the country for a long time, so that Dunlop was widely known not only as a supplier of tyres but also as an employer and rubber producer. Dunlop's interest in local tyre manufacture first showed itself at the beginning of the 1950's. At that time all motor tyres were being imported, but there was already some local manufacture of cycle tyres and certain other products of the rubber industry such as footwear.
3. The first Dunlop initiative was an attempt to buy a small cycle tyre factory which came up for sale. This fell through in the end, but it is interesting to note that the objective was to protect the company's position in cycle tyres and camelback, and, as the authorities had already expressed a wish to encourage the development of a local rubber manufacturing industry, to be in a position to expand into car and truck tyres at the appropriate time.
4. After this episode nothing happened for several years. This period of quiescence, from 1953 to 1957, coincided with the Emergency, and in retrospect it looks as though the difficulties of the security situation combined with pre-independence uncertainties about government policies were an effective deterrent to foreign investment.
5. By the end of 1957, the military side of the Emergency was over and Malaya had become independent. Growth prospects looked promising, both for the economy as a whole and for the markets in which we were interested. The new government had adopted a favourable policy towards industrial

development and - a further spur - it became known that two prominent international competitors were submitting proposals for local tyre manufacture to the government.

6. Preliminary studies indicated that a factory would yield satisfactory profits given adequate protection against imports, and it was decided to enter into negotiations with the government.

7. Further, detailed studies in 1958 brought out several important points:-

- a) The forecast demand for tyres in the first year of full working by a new factory would represent a volume of manufacture barely adequate for a minimum economic tyre plant.
- b) Malaya and neighbouring countries were enjoying very low prices for tyres because they constituted a highly competitive market for tyre manufacturers throughout the world. There were more than 30 different makes of tyres imported, and prices were kept low by the existence of surplus capacity in the main manufacturing countries, which encouraged a form of dumping.
- c) Wages and costs in Malaya were high compared with those in most other Asian countries. Labour, for example, was 70% more than in India, and electric power more than twice as much. The lower price of rubber in Malaya was partly offset by higher prices for other raw materials used in tyre construction.

8. The combination of these factors - limited volume of demand, high manufacturing costs and low current selling prices - created a situation unfavourable to local manufacture. The government

nevertheless indicated its wish to see a tyre factory established, and continued to entertain approaches from competitors.

9. It was clear to us that local manufacture could only be commercially successful in Malaya, given the difficulties I have mentioned, if all, or a large part, of the entire market demand was supplied by the proposed ~~new~~ factory. And since the Malayan government was understood to be opposed to quantitative import restrictions, it followed that the required concentration of demand would have to be achieved by (a) raising import duties to prohibitive levels and (b) ensuring that no other company would be allowed to manufacture motor tyres in the country. At the same time it was clear that some increase in selling prices would be necessary to ensure that the new factory yielded a satisfactory profit, in view of the high costs of production already mentioned. A further requirement was that the necessary machinery and raw materials should be allowed to enter the country duty free.
10. With regard to capital structure the Dunlop Company, in line with its normal policy, felt that Malaysians should be allowed to participate. It envisaged a public issue of 49% of the ordinary shares.
11. Proposals along these lines were submitted to the Malayan government in early 1959. It was not surprising that the authorities there should have some reservations about accepting them, since the package we proposed contained some politically unattractive items - a big increase in tariffs, higher selling prices and a monopoly position for one foreign-controlled manufacturing company. Despite this, acceptance of these terms was necessary if Malaya was to acquire a successful tyre industry, and we had to convince the authorities that this was so.
12. The negotiations were very protracted. The delay was caused partly by the difficulty of getting the Malaysian authorities to accept the arguments for our

10/10/47
Page 29

proposals, and partly by the pressure of work on the arising import number of industrial projects under consideration, a shortage of professional advisers and the fact that the Civil Service was being Malayanized and there were undergoing rapid changes.

13. Another difficulty was that the legal and administrative framework of the country was not very well adapted to the particular situation. The central feature of Malaysian industry and plant legislation was the provision for granting Minor States to new companies, the benefit of which was exemption from tax for a limited number of years. An application was made for Pioneer Status for the proposed factory but this in itself was not enough. Another application had to be made to a body called the Tariff Advisory Committee for a tariff change and concessions we deemed necessary, and this had to be pursued separately, with no guarantee of the final outcome. Sole manufacturing rights were another source of difficulty, since no law existed by which the Government could grant such rights. In order to add to the content of an undertaking, that a co-sacrifice party to Pioneer Status would be issued to another company in respect of a tyre factory.

14. Despite these difficulties, agreement was finally reached some three years later with concessions on both sides. Of interest is that we had to satisfy the Malaysian authorities that there was a genuine need to use a proprieetary synthetic rubber in the plant. And when this had been established we had to undertake to limit our imports of synthetic to the minimum to do to fulfil our exports competitive in quality. Malaysian concern on this point was always very understandable, in view of their interest in natural rubber and the fact that

synthetic has to be imported.

15. Another interesting feature of the negotiations was that we undertook to supply tyres to a sister company under what is known in the industry as an off-take agreement, following a precedent established in other countries. This is a system whereby one company manufactures in the factory a range of tyres for a competing company, using the competitor's moulds, but leaving marketing and distribution to the other company. The advantage to the consumer is that while factory utilization is built up and thus costs and prices held down, it is at the same time offered the choice of two competing brands of international standing.
16. To round off this point let me conclude by relating that production began at the new factory in 1963. After some initial teething troubles it built up to the planned level, and regular exports began to be made in 1965. The number employed by our Malaysian company is now just over 1,000, of whom a dozen are expatriates. Malaysian personnel are increasingly filling positions of responsibility and it is planned to reduce the expatriate staff still further during the next few years. Imports of tyres, which is a large item in this country's import bill, have been much reduced and have been done away with on a small scale. This project has therefore achieved in full measure of success in meeting the objectives of the company and of the Malaysian government, a success which reflects credit on both sides, not only in the original negotiations but also in subsequent operations and policies.
17. The development in Malaysia has been very successful from many points of view. It has contributed to the industrialisation programme and also economic growth, thereby furthering the cause of Malaysian independence. Successful domestic production of tyres and other rubber products has strengthened the Malaysian balance-of-payments and provided a substantial volume of employment

direct and indirect. Its success has also stimulated other industries to follow suit and continue the useful trend of development.

J. CONCLUSION

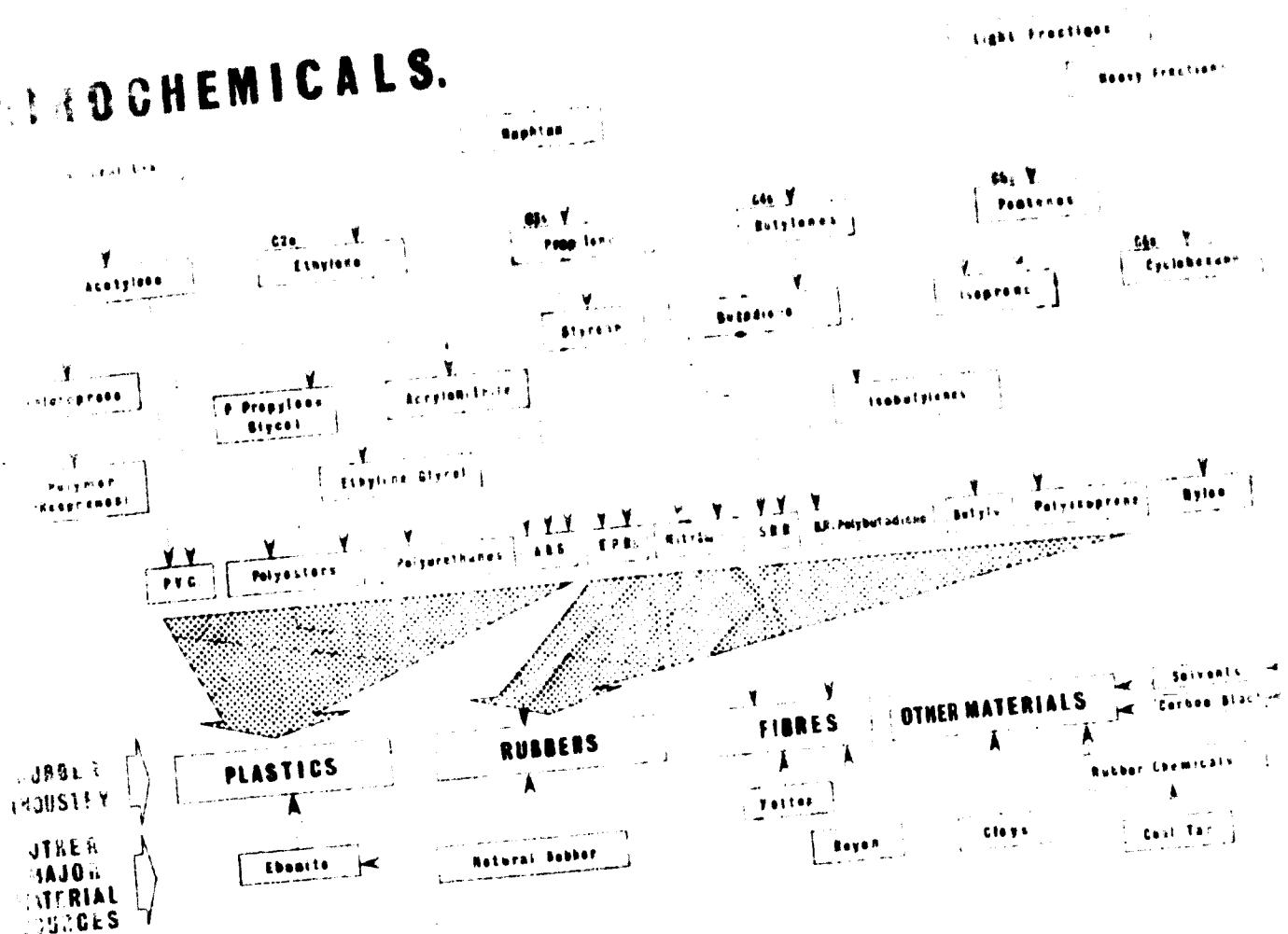
1. We have enjoyed the opportunity of presenting our view to this gathering. Our industry, the rubber industry, is unique in that it is between the petrochemical industries and the consumer whose satisfaction is the ultimate justification for economic activities. The wide range of interesting products offered by petrochemical applications ensures that their demand will expand rapidly in the coming years. They will be required in almost all types of final product.
2. The rubber industry itself has a very wide range of products, many owing their origin historically to the unique properties of natural rubber. Today the industry is increasingly turning to synthetic materials for enhanced properties found in many fields. Without question, its best in its basic material. More and more plastics as well as synthetic fibres and rubbers are being manufactured by firms which started life in the rubber industry. The rubber industry is therefore turning itself into a consumer of polymers rather than of rubbers and will produce and greater variety as required in the process. It tends to use engineering co-polymers. It is no accident that my economy dropped the word "rubber" from its title at the beginning of 1954.
3. The Dunlop Company is an international group, certainly in the sense that its activities are not confined within the boundaries of a single nation but perhaps more significantly in the sense that it regards itself as widely based. When the earliest inquiries it has always been

10/10 31/47
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International in scope and today the "over 50% of its assets are in
overseas countries.

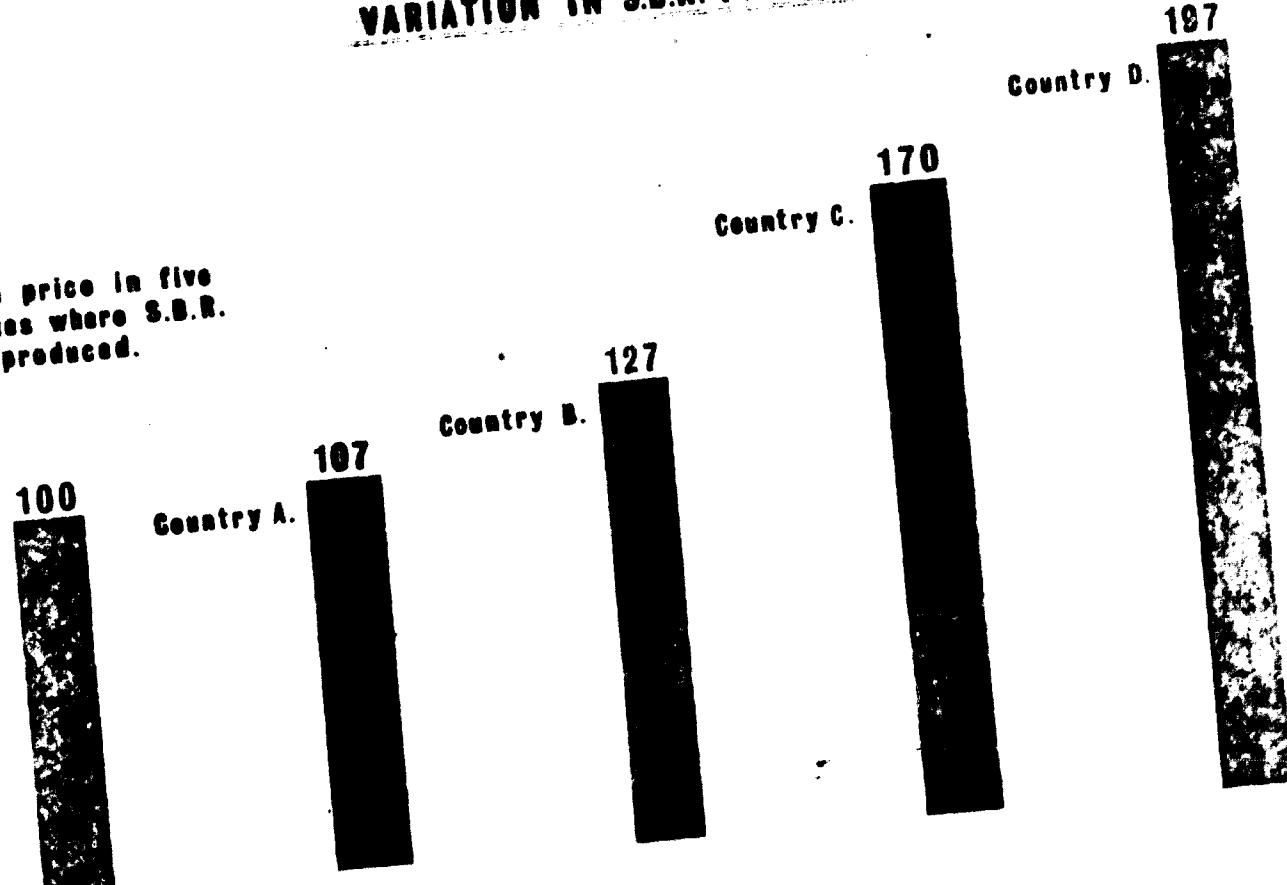
The company continues to fulfil its international character as having an anti-
colonial implications. This demand for autonomy from national governments
develops in many areas of the world and it calls for national participation in
shareholdings. Also, overseas persons working in co-ordination with the
Group's headquarters in London, it is an open two-way process, that the
company believes should have a value of mutual interchange of ideas, views and
experience. An international business must be a centre of local activity with
measures necessary to conserve and direct efficiently its resources -
management, technical skill and finance, particularly in support of its long-
term plans. In addition, the effectiveness of a world-wide enterprise depend
on the co-ordinated collective efforts of all the individuals who together make
up the Company.

INDO-CHEMICALS.



Chart

VARIATION IN S.B.R. PRICES



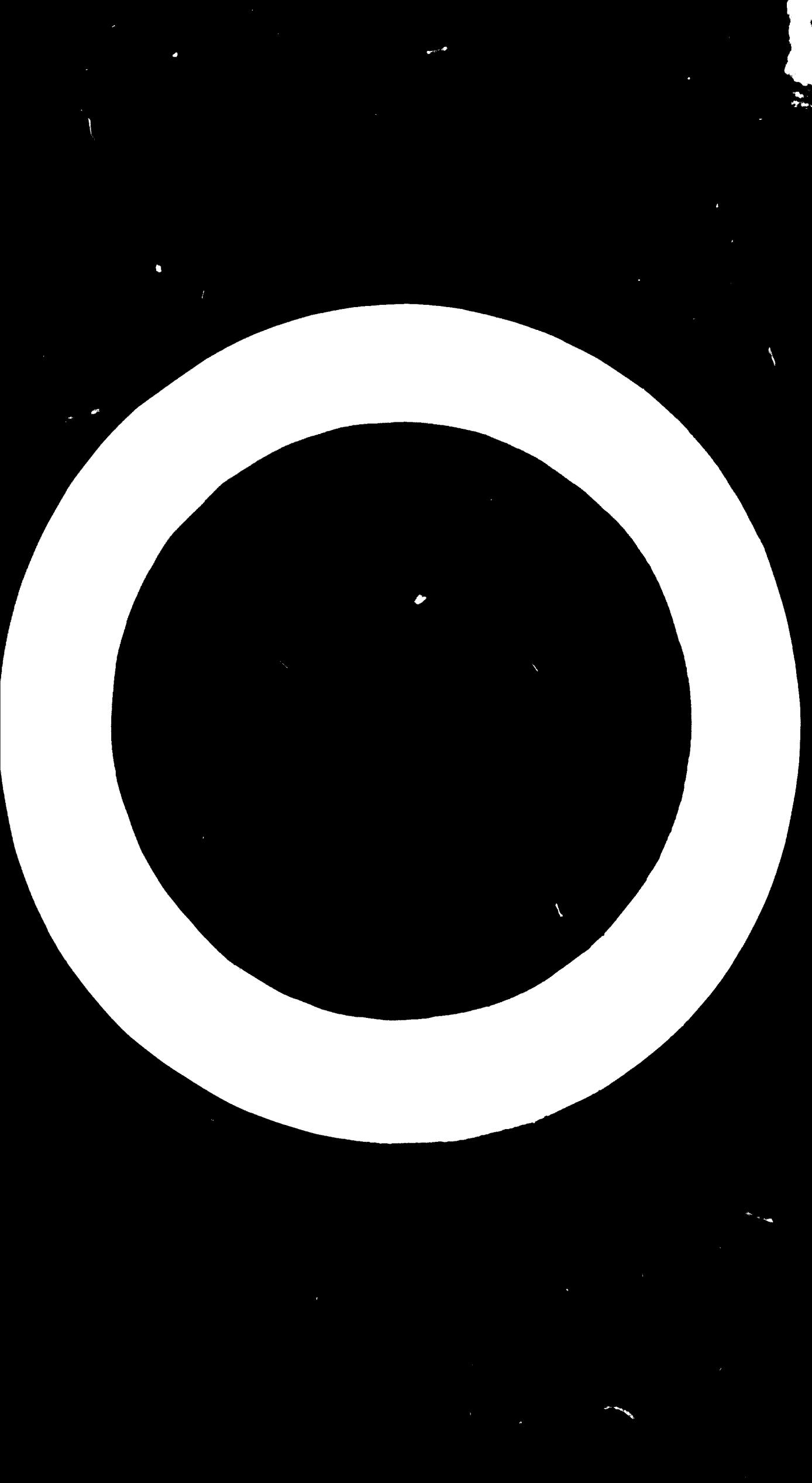


Chart 3

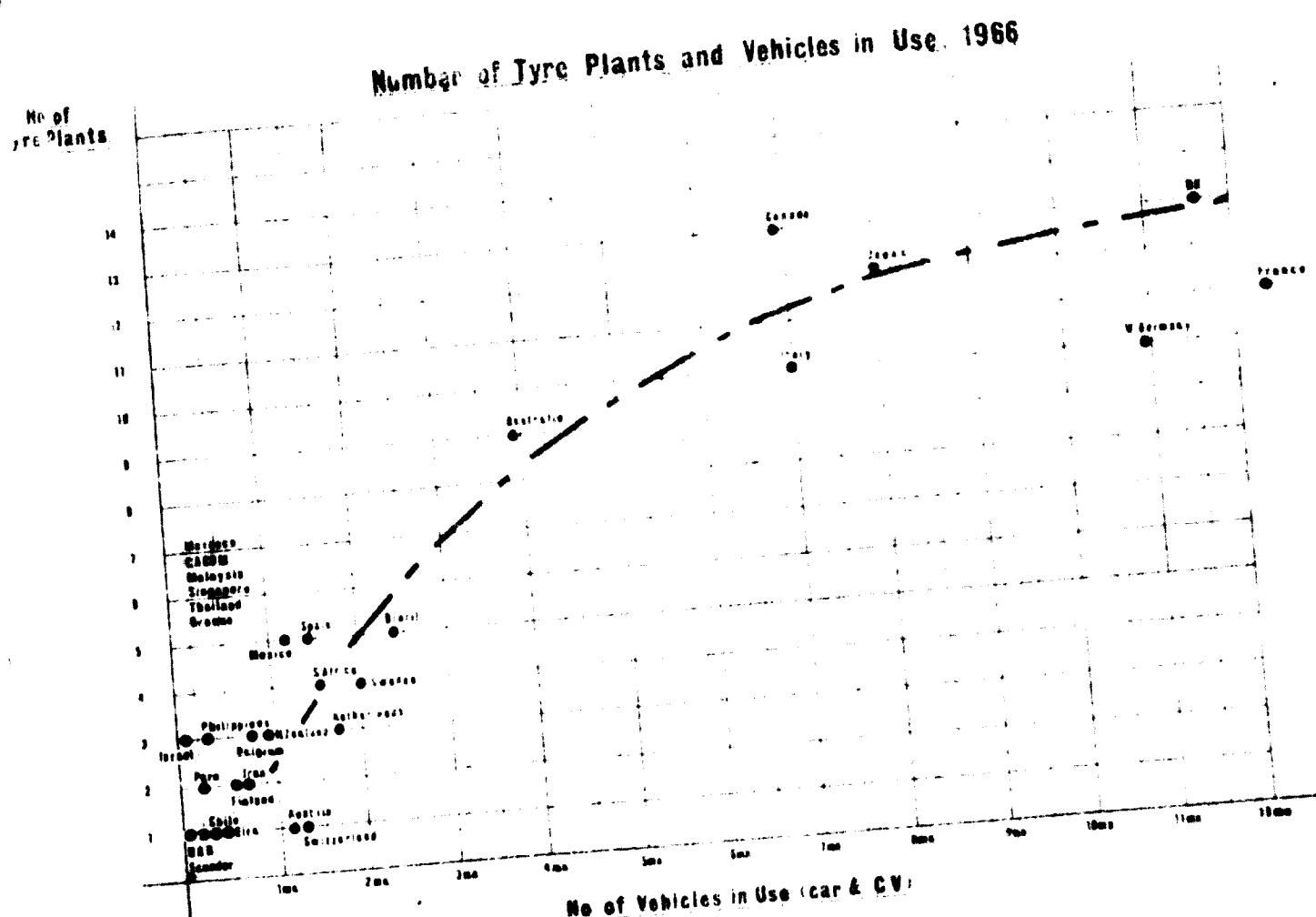
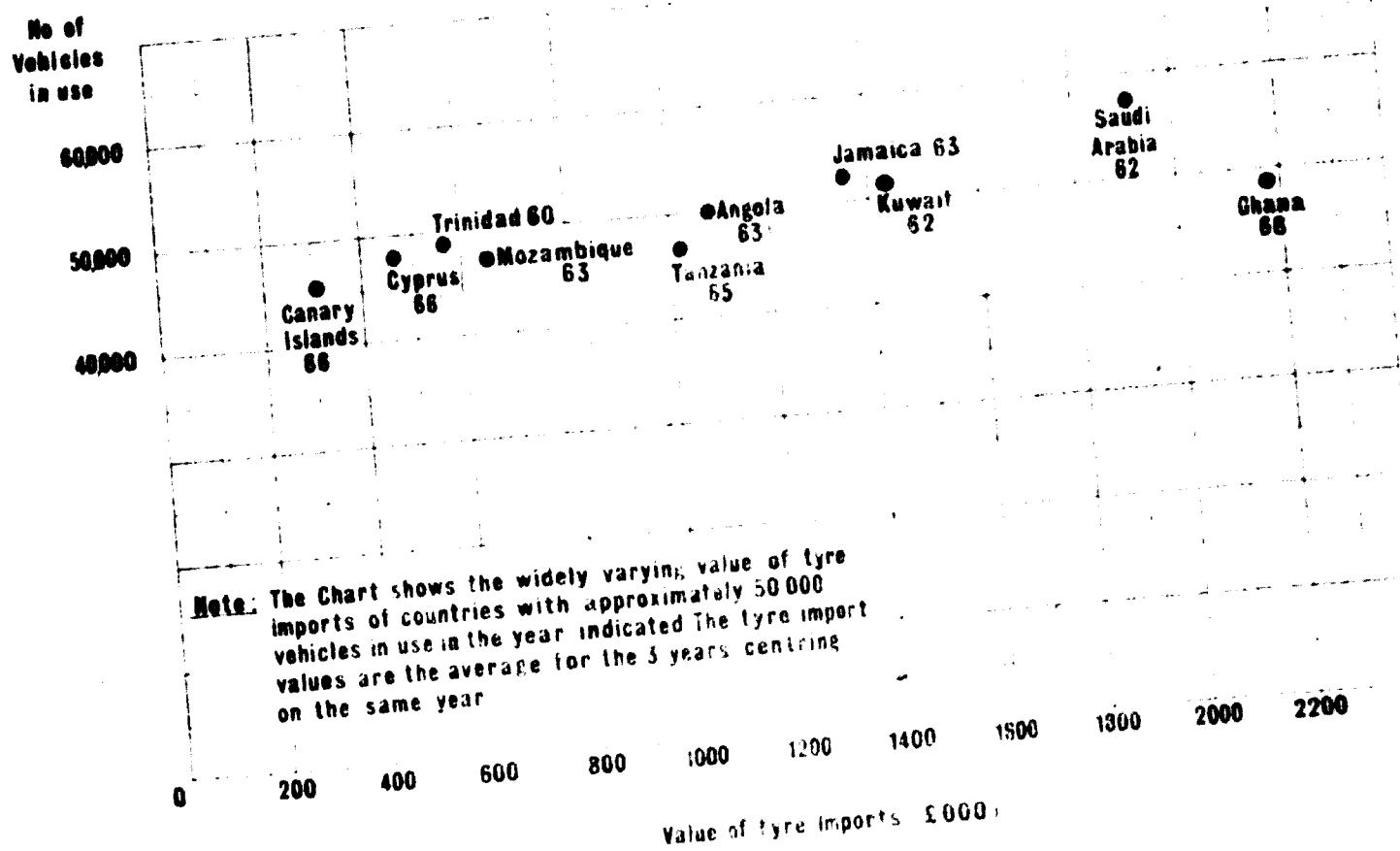
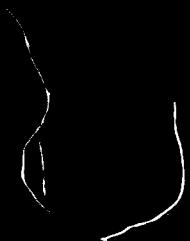
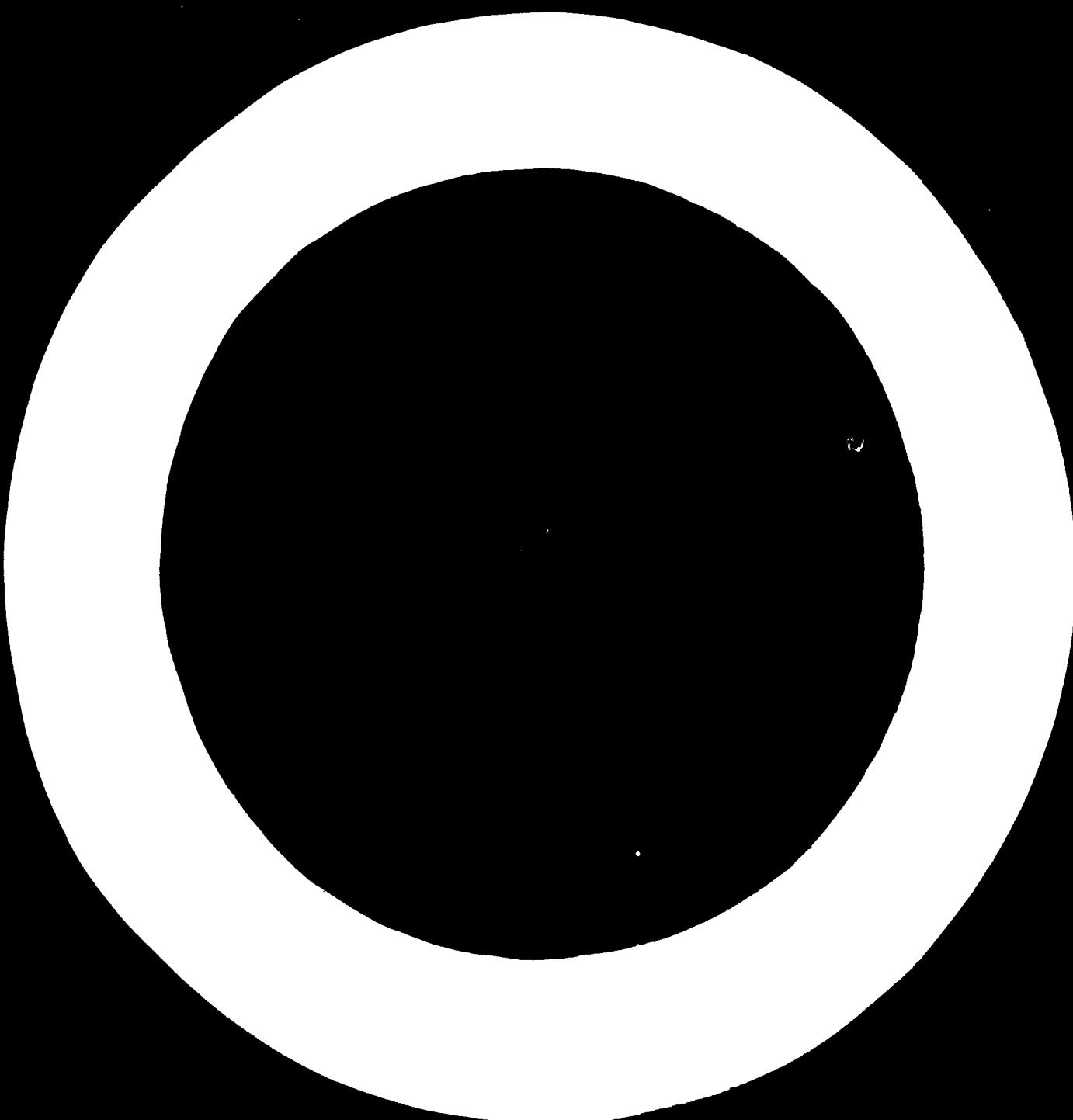


Chart 4

Number of Vehicles in Use and Value of Tyre Imports





1

34/41

Chas.

Exports of Tyres 1957 and 1967 (£mn)

| | 1957 | | 1967 | |
|------------------------------------|--------------|--------------|--------------|--------------|
| | £mn | % of Total | £mn | % of Total |
| Developed Countries | | | | |
| EEC | 42.9 | | 123.5 | |
| USA | 35.8 | | 20.8 | |
| UK | 25.3 | | 30.0 | |
| Japan | 7.5 | | 30.3 | |
| USSR & Eastern Bloc | 4.5 | | 15.5 | |
| Other developed European Countries | 5.3 | | 23.2 | |
| S. Africa | 3.1 | | 1.4 | |
| Canada | 2.3 | | 5.3 | |
| Israel | 2.1 | | 3.4 | |
| Australia | 0.3 | | 0.8 | |
| Sub-Total | 129.1 | 98.5 | 254.2 | 95.0 |
| Intermediate Countries | | | | |
| Spain | 0.1 | | 2.8 | |
| Portugal | 1.0 | | 2.2 | |
| Greece | - | | 0.1 | |
| Sub-Total | 1.1 | 0.9 | 5.2 | 2.1 |
| Developing Countries | | | | |
| India | - | | 1.4 | |
| Others | 0.8 | | 4.2 | |
| Sub-Total | 0.8 | 0.6 | 5.6 | 2.1 |
| All Countries | 131.0 | 100.0 | 265.0 | 100.0 |



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