INVESTMENT DECISIONS IN UNDERDEVELOPED COUNTRIES

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1. *Introduction*

> "Just as peoples' outlook may affect their economy, so the nature of their economy influences their outlook."—*Report on Cuba*, Johns Hopkins Press for International Bank for Reconstruction and Development, 1951.

SCOPE OF THE STUDY

This paper is chiefly concerned with the economic, organizational, and institutional determinants of investment decisions in underdeveloped countries. Although the social and cultural determinants are discussed by another contributor, it will not be possible to maintain this distinction. To do so might even appear, at first sight, undesirable to those who favor a unified approach to problems of economic development. A sense of past neglect seems to impel economists to give, at present, more weight to "noneconomic" factors. This tendency, however laudable and indeed inevitable, threatens to lead to disregard of the economist's own field of investigation. Factors of undisputed importance, like the presence of traditional preferences or the absence of change-producing tendencies, are too easily accepted by the economist as noneconomic data, perhaps to be integrated into the economic system as somewhat shapeless propensities, difficult to define and still harder to measure. Having conveniently transferred the issue to the other social sciences, the economist is tempted to leave a basic question unasked or insufficiently answered: Are there economic determinants of such apparently noneconomic motivations?

Not infrequently, this issue is further obscured by a tendency to identify noneconomic with irrational motivation, whereby the impatient or zealous observer interprets as "irrationality" the subject's inability or unwillingness to undertake what is unquestionably deemed to be in his best interest in the long run. Transferred to

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the field of economic preferences, this attitude—of the observer, not the observed!—induces another hazard, that of regarding as irrational those decisions and actions which are not considered socially desirable from a predetermined policy aim such as that of rapid or balanced economic development.[1] It would appear more appropriate to analyze the disincentives opposing the socially desirable action. It may then develop that there are distinct economic and institutional reasons for such decisions and actions. Other social sciences can fruitfully investigate the social and cultural continuity which characterizes the persistence of attitudes no longer deemed compatible with economic progress. The economist, however, can isolate, diagnose, and analyze the economic phenomena which induce expectations and, hence, "rational" actions favorable or inimical to economic development.

In focusing on investment, this study cannot escape an assumption which keeps close to the traditional concept of economic rationality: that of pecuniary motivation.[2] It is thus assumed that investment is not, or not primarily, undertaken for the enhancement of social status, for example, but for the purpose of acquiring assets apt to increase in value or to produce output whose sale is expected to result in assets exceeding the value of the original investment. A potentially controversial example will illustrate the point. The acquisition of real estate is often considered as evidence of sentimental attachment to land or of feudal patterns of unproductive investment. This explanation may be perfectly correct in some instances; in others, however, such "investment" may result from preferences well founded in the expectation of profit or, conversely, of security against a danger of depreciation that might face other forms of asset-holding.

This paper, therefore, starts from the assumption that a potential investor is willing to acquire other assets rather than hold idle hoards or cash balances. Each investment decision, however, still presupposes a choice of alternatives and, hence, a weighing of risks against security, of expected profits against potential losses. Assuming a desire for gain, a sizable range of investments of varying attractiveness usually exists: short-term or long-term, speculative or "solid," unproductive or productive. This relative attractiveness is the center of interest of this paper, which makes no claim of break-

[1] Cf. John H. Adler, "The Fiscal and Monetary Implementation of Development Programs," *American Economic Review*, May 1952, p. 592.

[2] Cf. Moses Abramovitz, "Economics of Growth," in *A Survey of Contemporary Economics*, B. F. Haley, editor, Irwin, 1952, Vol. II, p. 158.

ing new ground. An attempt is made, however, to present the scope of expectations and their factual background in underdeveloped countries in a more analytical and concentrated manner than that offered by the numerous country surveys and reports. Before proceeding in this direction, it appears proper to point to some topics of contemporary discussions which have a bearing on our handling of the problems of entrepreneurship in underdeveloped countries.

CHARACTERISTICS OF ENTERPRISE

The process of perceiving opportunities, evaluating them, and choosing between alternatives requires a number of qualities and attitudes which are subsumed in the concept of enterprise: intelligence and open-mindedness in discerning opportunities and appraising their various future possibilities; also perseverance in accepting sizable disutilities in the form of work and trouble in the execution of plans. In fact, the preliminary job of evaluation presupposes a series of steps rather than a single act of appraisal: forming judgments regarding the future course of yet-unexplored events, weighing the necessary adjustments to such a course, and devising and executing plans of adjustment.[3] While these steps require qualities which may be latent in a smaller or larger number of individuals, it may be well to recognize the importance of a suitable basis for the individual's confidence in his own judgment and his ability to carry out his plans. Past experience would seem to be the most favorable basis for such confidence. It may not be essential for this experience to be rooted in the individual's own past or to have been gained in precisely the same field of endeavor. If we talk of a "tradition" of entrepreneurship, its chief effective ingredient appears to be the degree of confidence provided by the subjective feeling of doing something that is new but not entirely so. It seems clear, without further elaboration at this point, that such a basis of subjective experience, or such easily accessible background for reference, is largely missing in early stages of development.[4] The gradual formation of such a framework of experience in the course of development may also help explain the emergence of native entrepreneurship within relatively short periods of time in

[3] Cf. *ibid.*, p. 157, and Frank H. Knight, *Risk, Uncertainty and Profit*, Houghton Mifflin, 1921, pp. 241 ff.

[4] Cf. H. W. Singer, "Obstacles to Economic Development," *Social Research*, Spring 1953, p. 23.

countries where it had been conspicuously scarce for long periods of the past.[5]

This stress on limited and gradual innovation appears to conflict with the more heroic concept usually associated with the name of Schumpeter. His prototype of the entrepreneur is a man who perceives new methods of production which deviate deliberately from the pattern of past performance. History provides relatively few examples of such sharp breaks in contrast to the frequent, perhaps "normal," case of novel features superimposed on familiar technology.[6] The degree of technological discontinuity has, however, some bearing on the extent of entrepreneurship which backward areas require for their economic development; in this context the discussion concerned is of interest to the present paper.

THE ROLE OF ENTERPRISE IN UNDERDEVELOPED COUNTRIES

At least two recent writers[7] have pointed out with great acumen that underdeveloped countries are not representative of a "Schumpeterian world." Their entrepreneurs are not original innovators because they obtain their technology ready-made from the industrial countries.[8] This process of adaptation would seem to rank lower in inventiveness than original innovation, but some comfort could be derived from the fact that the attribute of creativenesss is occasionally applied to this process, too.[9] Our present interest in this discussion lies in two different directions. A lesser degree of initiative is needed to apply existing technical knowledge than to initiate complete innovation; moreover, the process of developing a new technology and nursing it from the drawing board to commercial success is not only frustrating and time-consuming, but extremely costly. It requires capital and skills, both scarce in backward areas. Hence the "adaptive" type of enterprise ought to arise more easily in

[5] E.g. in Mexico in the past twenty-five years.

[6] Cf. Abramovitz, *op. cit.*, p. 142.

[7] Henry C. Wallich, "Some Notes towards a Theory of Derived Development," paper presented at the third meeting of Central Bank Technicians, Havana, 1952, mimeographed; and Singer, *op. cit.*

[8] Some implications of this fact will be discussed in section 3 of this paper. Cf. also Singer, *op. cit.*, pp. 24 ff.

[9] Cf. Fritz Redlich, "The Business Leader in Theory and Reality," *American Journal of Economics and Sociology*, April 1949, p. 226. He also coins the terms "creative capitalist" and "creative manager" for people responsible for new ways in their respective fields. The difference between passive acceptance of and active response to external stimulation is stressed by J. A. Schumpeter in "Creative Response in Economic History," *Journal of Economic History*, Supplement, 1947.

early stages of development than the more strictly Schumpeterian kind, however defined. In our context, then, the "adaptive" entrepreneur's task is finding and applying the most suitable known techniques; more will be said about this in the section devoted to the choice of technology.

The entrepreneurial activities required to start a new industrial enterprise in an underdeveloped country are not restricted to the choice of technology; different qualities are needed than those implied in the concept of an innovator who only once combines the factors of production in a new manner and at lesser cost. A "successful" entrepreneur under conditions of scarcity of entrepreneurship may turn out to be a man who does not permanently stay with the enterprise—a kind of professional promoter who withdraws when the new business is under way and starts another to which he applies his capital and both profits and experience acquired in his preceding promotional activities. This type of entrepreneur scouts for new opportunities, investigates them, and evaluates their potentialities. He has to define the nature of the product; assess the supply of materials, the scope of the market, and the proper organization to cover it; then decide on the size of the plant and the type of technology. Last mentioned, but often first in consideration, are schemes for financing, the distribution of risk, and remuneration for promotional services.[10]

Such professional promotion achieved considerable importance in the Indian system of managing agencies, which promoted some of India's most important industries. In their case the entrepreneurial function was somewhat institutionalized. Scarce private initiative may be supplemented by semipublic pioneering, in the form of development agencies or corporations not necessarily implying permanent public management. This tends to occur whenever the ability to conceive investment projects, plan them, and put them into operation becomes a more limiting factor than lack of capital. This is, indeed, the rule rather than the exception in those underdeveloped countries which have not yet developed that background of entrepreneurial experience mentioned above.

The purpose of drawing attention to the promoter type of enterprise in contrast to the owner-manager type with its permanent character was to emphasize a less publicized type of entrepreneurship. This may, incidentally, help to lay the ghost of the "Schum-

[10] A. A. I. El-Gritly, "The Structure of Modern Industry in Egypt," *L'Egypte Contemporaine*, November-December 1947, p. 377.

peterian entrepreneur," which still haunts discussions of contemporary enterprise under conditions far removed from the original theoretical model. This statement, however, should not be interpreted to mean that the "Western" type of entrepreneurship has no place in underdeveloped countries. It exists in many forms, in persons ranging from owners of humble shops to industrial tycoons like Francesco Matarazzo in Brazil, who started out with a small store in the interior and built an industrial empire comprising 286 separate enterprises.[11] Like most socio-economic phenomena, entrepreneurship is too complex to be cast into a single type or pattern.

CRITERIA FOR INVESTMENT PREFERENCES

Up to this point this paper has adopted the customary implicit assumption that entrepreneurship can be treated like a scarce commodity indispensable for economic development. Perhaps it should be regarded as a human catalyst which transforms, by the process called investment, potentially available resources into additions to the stock of national capital. A mere change of ownership of a piece of real estate, to give an example, could not be considered investment in this aggregative sense. In the mind of the potential investor, however, such acquisition of existing assets presents a real alternative competing with the type of investment which will eventually increase the output of goods and services. A study of investment choice cannot ignore such a realistic alternative on the ground that it cannot be considered "investment" in the aggregative sense. True, much depends on the use the seller of the asset makes of the proceeds of this sale; it is, however, evident that a continuous chain of such "unproductive" investments is not a negligible phenomenon but frequently presents a very potent distraction from the kind of investment that may be favorable to economic growth.

A conceptual restriction is revealed by the frequently used term "unproductive investment." Never clearly defined, it seems to refer sometimes to the creation of assets which will not directly increase productive capacity or average national productivity. At other times, the term appears to involve some kind of judgment about balanced development. The building of luxury housing is a favorite target of criticism for this school of thinking while the construction of housing per se is accepted as essential; in other words, this type of

[11] George Wythe, *Industry in Latin America*, 2nd ed., Columbia University Press, 1949, p. 163, and George Wythe, Royce A. Wight, and Harold M. Midkiff, *Brazil, an Expanding Economy*, Twentieth Century Fund, 1949, p. 177.

"unproductive investment" would seem to provide an opportunity for luxury consumption in whose absence, presumably, both the investment in question and the future unconsumed surpluses would be used in a better manner—that is, one which furthers development.

This kind of thinking implies a welfare judgment which does not conform to the profit-oriented investment criteria of the investing individual. Hence, some "unproductive" or "speculative" investment may be entirely logical and desirable for the individual investor while appearing undesirable from the standpoint of a policy aiming at rapid development of the economy as a whole; moreover, the time preference of the entrepreneur, being oriented toward profit, may differ from the socially determined time schedule of output increases of specific goods and services.[12] It is thus natural that critical attention is given to situations which favor a shift from investments of high social benefit to those of high private benefit, such as the diversion of investment into real estate or inventory accumulation induced by inflationary tendencies.[13] Conversely, policy discussions dwell on incentives, assistance, or controls by which governments may induce or compel a more "desirable" direction for investment.

For the purpose of this paper, however, a different course is adopted. Since we are concerned with the determinants of the entrepreneur's investment decision, we must attempt to view them from his point of view, assessing the subjective and objective factors that motivate his action in underdeveloped areas. Then only—and this paper does not claim to move more than a step in this direction —can we hope to assess objectively the relative strengths of forces which oppose or favor "desirable" types of investment. In referring to subjective factors first, no a priori judgment regarding rank of importance is intended. No matter how tangible the objective criteria, such as factor supply or size of demand, appear, the investment decision will be based on the perception of opportunities which, while pointing to the future, exist only in the present in the investor's mind. The process of evaluation which precedes decision and action is, essentially, one of sifting impressions, of matching observable factors with anticipated alternatives—in short, of assimilating events into the structure of expectations.[14] It therefore seems natural to

[12] Cf. Adler, *op. cit.*, p. 592.

[13] Cf. E. M. Bernstein and I. G. Patel, "Inflation in Relation to Economic Development," *Staff Papers*, International Monetary Fund, November 1952, p. 383.

[14] G. L. S. Shackle, *Expectations in Economics*, London, Cambridge University Press, 1949, pp. 70 and 75.

discuss first the place of expectations and their direction under conditions prevailing in underdeveloped areas—to place commensurate emphasis on uncertainty as a negative factor in investment decisions and to point to the entrepreneur's background as one element affecting this uncertainty. Then we shall consider the basic alternatives which are the objects of the investment decisions. And finally, the objective determinants of the investment decision will be discussed: conditions of entry; size of the market; availability of capital, labor, and skills; and costs, prices, and profits. Factual examples from underdeveloped countries will be used as much as possible to illustrate the points set out in a general fashion.

2. *Expectations and the Choice of Investments in Underdeveloped Countries*

INVESTMENT DECISION AND UNCERTAINTY

Any investment decision involves a weighing of profits and risks attending, or believed to attend, various alternatives of investment in the future. Leaving risk estimates aside for the time being, the evaluation of profit can be made the point of departure for our deliberations.

Since profits are the difference between prices and costs, the level and future course of both of the latter will have to be estimated. The expected volume of sales will enter into an estimate of gross revenue, both volume and prices depending on the size of the market, type and intensity of competition, customs protection, etc. Prime unit costs of materials and wages will have to be assessed, appraisals of the latter depending on estimates of productivity; these presuppose alternative hypotheses regarding technology and size of plant which are also influenced by the size of the expected market and the availability and cost of finance. All of these factors tie in with assumptions about both the internal and the marketing organization of the firm, assumptions which in turn determine overhead costs and affect profits, considering once more the volume of sales. These factors will be discussed in later chapters, but this list—which is far from exhaustive—will serve to illustrate the variety of interlocking considerations which can be ignored only at the investor's peril. It is one of the main propositions of this paper that an awareness of this peril, however dim it may be in any individual investor's mind, is one of the greatest obstacles to positive investment decisions.

In industrially advanced countries the basis for estimating the factors enumerated above is infinitely wider and the requisite skill more generally available. A "Schumpeterian entrepreneur" need not worry about the market because he will, by definition, produce his goods at lower cost and find an outlet for them by underselling others. The "imitator" among entrepreneurs has, as a rule, some direct knowledge of the product and its markets; otherwise, expert information and advice can be obtained at reasonable hire from individuals familiar with the trade or from experts in market analysis. Such outside technical advice is available to the little fellow, while larger firms can also draw on their own technical or research staffs.

In underdeveloped countries the situation is very different. Experts for exploratory investigation are rarely available locally; foreign experts are costly and their advice is not always suited to different conditions. Often the lack of or deficiencies in statistics make estimates of consumption and markets, of costs and capital requirements, very difficult if not totally impossible. Worse yet, since many preliminary services which come ready-made in industrial countries are absent, the initial capital outlay is increased and a risk of running short or "making do" with regard to skills, parts, and sometimes even power and transportation is incurred. Planning deficiencies, caused by lack of means to carry out the required scrutiny of new ventures, appear as an almost inevitable danger. Some of the factual country reports picture this situation.[15] The lack of economic and technical research facilities is sorely felt in underdeveloped countries and keeps even basic knowledge of opportunities from maturing. Government research is frequently recommended as a remedy, but it cannot alone build the bridge between an idea and its execution since ideas rarely arise where there is a vacuum with respect to knowledge or experience. It does not come as a surprise to hear from Indian observers that industrialists rarely base their estimates on scientific calculation. As a substitute, they tend to take as a model another firm they consider profitable and approximate its organization with regard to size of plant, equipment, etc. If no such comparison is available, the characteristics tend to be set in an arbitrary manner without proper consideration of cost.[16]

[15] E.g. El-Gritly, *op. cit.*, p. 377; *The Economic Development of Guatemala*, Johns Hopkins Press for International Bank for Reconstruction and Development, 1951, p. 97; and *The Economic Development of Iraq*, Johns Hopkins Press for International Bank for Reconstruction and Development, 1952, p. 40.

[16] D. R. Samant and M. A. Mulky, *Organization and Finance of Industries in India*, London, Longmans, 1937, p. 91.

It should be evident without further argument that the establishment of a new industrial enterprise in an underdeveloped country is fraught with great uncertainty, greater by far than that involved in the same kind of undertaking in a more advanced country. The greater the novelty of the enterprise in any one country, the slimmer the base of reference and experience in nearly all respects. The facts of such uncertainty will hardly be disputed; but is it possible to establish its degree and to discount it so as to leave sufficient incentive for a positive investment decision without depending entirely on a spirit of venture akin to that of the gambler? The theory of expectations seems to promise an answer to this question, and it appears desirable to investigate its relevance for our problem.

UNCERTAINTY AND PROBABILITY

Uncertainty is not identical with absence of knowledge. In practical contexts knowledge of some aspects may be combined with ignorance of others; it may be preferable to consider degrees of knowledge rather than its presence or absence.[17] Knowledge of future events is, of course, impossible and has to be replaced by a procedure of anticipation which consists of several elements: an expectation schedule of magnitudes assigned to each contingency or possibility for each future date, a probability weight for each such magnitude expressing the likelihood or range of probability that the anticipated contingency will actually occur, the degree of subjective confidence in the individual's ability to predict or to assign objective probability ranges to the several contingencies.[18]

Uncertainty is responsible for the lack of any unique future magnitude. Instead, there is a set of possible magnitudes of which one may be recognized as the most probable; the definiteness of this probable magnitude depends on the probability distribution and the width of the range which expresses this degree of uncertainty. After eliminating extreme values which lack high probability ranks, a practical range may be expected to emerge.[19]

Assuming for argument's sake that the above procedure of estimation can be carried out, how large can the expected practical range

[17] Knight, *op. cit.*, p. 199.

[18] *Ibid.*, pp. 236 ff.; Albert G. Hart, "Anticipations, Uncertainty and Dynamic Planning," *Studies in Business Administration*, University of Chicago Press, 1940, Vol. XI, No. 1, p. 52; and Sidney Weintraub, *Price Theory*, Pitman, 1949, p. 345.

[19] Oscar Lange, *Price Flexibility and Employment*, Cowles Commission, Monograph No. 8, 1945, pp. 29 ff.

be in underdeveloped countries? Where the base of experience is narrow, can any extreme values be assigned such low probability ranks as to eliminate them from practical consideration? Perhaps no outcome within a range from extreme success to complete failure is so improbable that it can be dismissed altogether; it would certainly be dangerous to apply to *unexplored* situations a belief that extreme values carry less probability weight, a notion than can be derived only from *known* frequency distributions. It seems reasonable to assume that the practical range of probability distribution would be very large in underdeveloped countries, commensurate with the prevailing lack of knowledge and the resulting degree of uncertainty.[20]

In any event, magnitudes in different future periods lack comparability unless they can be reduced to present values. According to theory, this may be achieved by discounting the future values by a factor equal to the difference between the most probable value actually expected and the equivalent value expected with certainty; this difference represents an uncertainty allowance or risk premium.[21] Obviously, uncertainty is also related to time and will be the greater the more distant the future event; the risk premium increases accordingly and may become so large that it would discount present values to a point too low to be acceptable. Planning beyond this limit, which Tinbergen called the "economic horizon," is no longer possible.[22]

Any critique of these theories need not rest on the manifest difficulty of carrying out such calculations in practice; this is a common shortcoming of economic theory. However, a difficulty of a different kind afflicts the concept of contingency or possibility which is implicitly based on the knowledge that similar occurrences have happened before under strictly comparable conditions. Applied to investment decisions, it is thus essential to ascertain the uniqueness or homogeneity of similar cases.[23] This brings us back to the factual base of reference and of experience, which is, almost by definition, extremely slim in underdeveloped countries. A new industry in a partly explored environment comes as close to "uniqueness" as any innovation in a world where few things are entirely new.

A related argument carries rather more weight. Is it possible to square the concept of probability distribution with a businessman's

[20] See also Shackle, *op. cit.*, p. 61.
[21] Cf. Lange, *op. cit.*, p. 32, and Weintraub, *op. cit.*, p. 345.
[22] Lange, *op. cit.*, p. 32.
[23] Cf. Knight, *op. cit.*, p. 247.

thinking about his potential future profits?[24] Is the probability approach, based on a precise concept of frequency distribution, its shape and skewness, really applicable to decisions which lack the requisite wide actuarial base? The basic concept of probability involves the idea of a large number of repeatable tests by which ranks are assigned to various possibilities, thus substituting actuarial risk for knowledge. There may be some entrepreneurial decisions of a routine character which are repeated frequently enough to provide a basis of experience. Investment decisions are not of that nature. As a rule, there are only a few of them in a lifetime, often just one. Comparable experiences of others are still limited in underdeveloped countries. No such decision is repeatable in the strict sense of the probability concept. Probability reckoning, as set forth by Hart and Lange, thus cannot be relied upon to facilitate investment decisions. Instead of "large numbers turning ignorance into knowledge," we are faced with a kind of uncertainty that is another form of ignorance.[25]

THE MOTIVATION OF "TRADITIONAL" INVESTMENT PREFERENCES

Having acknowledged the prevalence of uncertainty and the difficulty of reducing its impact in underdeveloped countries, it is now possible to visualize its effect on the choice of investment. The chief considerations would seem to be *degrees of risk*, i.e. the dangers of losses in various pursuits, and, conversely, the *chances of profits*. In both directions it will be well to distinguish between the objective base of experience in underdeveloped countries and the expectations to which it gives rise; whether these latter are called "traditional" or, as is sometimes the case, "irrational" is frequently determined by the observer's approach rather than by objective criteria.

Theory's contribution to the problem of investment choice is limited. Cases of complete aversion to risk will not concern us here, since willingness to assume risks is basic for enterprise. The degree of caution, however, may be related to the time dimension of the venture and the size of the investment relative to all assets owned by the individual. An element of diminishing utility may be responsible for lesser satisfaction from a larger average income with wider fluctuations over a long time than from a smaller average in-

[24] Moses Abramovitz, *An Approach to a Price Theory for a Changing Economy*, Columbia University Press, 1939, p. 77.
[25] Shackle, *op. cit.*, pp. 6 ff. and 115 ff.

come with smaller fluctuations. In terms of expectations, then, the choice would be between plans offering higher but less certain expectations of profit and plans promising lower but more certain profits. Moreover, the caution factor will probably become larger as the involvement increases. In other words, the estimated utility of potential additional profits becomes smaller as profits increase and, conversely, the estimated disutility of additional losses becomes larger as losses grow. Furthermore, a certain asymmetry may arise from time lags in assimilating new experiences into the base of experience; a new venture takes a long time to "prove itself" while an early failure is easily assimilated into an existing background of distrust toward new types of venture.[26]

Turning to the practical aspects of the problems discussed, there are three basic sets of reasons why industrial investment may not be undertaken: (1) Lack of knowledge or experience is responsible for inability to recognize opportunities, for failure to plan with sufficient accuracy, or for fear of not being able to execute plans properly. (2) Inherent uncertainties, partly related to lack of experience, cause the investor to consider industrial investment as more risky than other alternatives. (3) The chances of profit are less, or are deemed to be less, than in alternative investments.

The lack of experience and knowledge has been discussed and need hardly be documented further. More should be said, however, about the effects of awareness of risk. Industrial enterprise is inherently of a long-term nature, while the preference for short-term ventures in underdeveloped countries is notorious. This preference can be linked with considerations of security and profit.

Dealing first with *security* as related to stability, the volatility of the political atmosphere in many countries makes it imperative that investors understand that a change in regime is often not restricted to the political scene; such a change may involve shifts in administrative personnel and policies, which may affect commercial operations through means ranging from placing of government orders to tax practice, economic controls, monetary policy, and development plans. A short-term rhythm of operations makes it easier to adapt to new situations and, especially, in the present context, to avoid unforeseeable dangers. An industrial enterprise cannot be adapted so easily or quickly. It lacks the security that lies in liquidity and flexibility.

[26] Hart, *op. cit.*, p. 72; Abramovitz, *An Approach to a Price Theory for a Changing Economy*, as cited, p. 81; and Shackle, *op. cit.*, p. 75.

While fear of political instability implies fear of risks which cannot be foreseen concretely, other pessimistic expectations are based on ample experience.[27] The risk of devaluation may serve as an example of widespread factual significance. If the value of money declines year after year, distrust as to its future value favors investment which prevents loss. Hence, real estate becomes a favorite object of investment; this preference creates at the same time a highly active market, which confers greater liquidity on real estate than on other assets. This type of investment thus offers two elements of security: stability in real terms, and liquidity, a hedge against devaluation and also against unexpected contingencies. At the same time, it offers opportunities for quick and substantial profits. The conditions here described can be observed in a number of countries; they are mentioned most prominently in relation to Chile and Brazil.[28]

Another cause of instability, less frequently mentioned, is related to the economic structure of many underdeveloped countries and therefore is very serious. Countries depending on the export of a few primary products for a large part of their national income have, in the past, experienced vehement swings of an exogenous nature whose effects they could not control. They cut so deeply into income and consumption that they are, in many countries, the major factor responsible for prosperity or depression. Clearly, long-term planning in the shadow of such contingencies is both difficult and risky. Capacity of the plant and size of the investment are placed at the mercy of unforeseeable events. Short-term investment offers a better chance to "get out from under," with liquidity and flexibility again being the controlling factors.

In addition to such cyclical fluctuations, the seasonal cycle of such products causes chronic economic insecurity in some countries. In Cuba nearly the entire economy is geared to the rhythm of sugar production. Shortly after the season, which lasts only two to four months, economic activity tapers off. Such seasonal instability makes industrial production very difficult and planning for it still harder.

[27] It could be said that the former type is due to uncertainty, the latter to risk, in the sense in which Knight uses these terms; in Marschak's interpretation of Knight's terms "risk" is the known parameter of frequency distribution and "uncertainty" is lack of knowledge of this parameter. Cf. Jacob Marschak, "Lack of Confidence," *Social Research*, February 1941.

[28] Cf. *Report of the United Nations Mission to Chile 1949-1950*, United Nations, 1951, p. 3; *Report of the Joint Brazil-U.S. Technical Commission*, Dept. of State, June 1949, p. 151; and Bernstein and Patel, *op. cit., passim.*

Superimposed on this instability is the anxiety about the price of sugar, in which most persons in the economy have a direct or indirect stake, creating a kind of "boom mentality" conditioned by short-term fluctuations. Such a climate is most unfavorable to long-term ventures and favors activities where the turnover is quick and the profit high.[29]

Considerations of security affect not only the entrepreneur himself but the institutions or individuals to whom he may have to look for additional capital and credit. Banks will withhold credit if they consider the risk too high to be covered by normal interest charges; this, too, will be judged not by absolute standards but in relation to opportunities for lending funds for alternative investments. Lenders' risk is also determined by a desire to avoid such complications as litigation and foreclosure, which appear more likely in connection with untried ventures. In an unstable economy even "bankable" collateral is apt to become illiquid; banks prefer, therefore, to lend to trusted clients of old standing, and, unhappily, the innovators are less likely to be found among these members of the traditional commercial group.[30]

Before the discussion of risk and security is concluded, reference should be made to the belief that risk is gradually becoming less problematic to business because business is steadily working at reducing risks by auxiliary services, market research, and other devices.[31] Nothing could better illustrate the gulf between a developed country like the United States and an underdeveloped country, where, indeed, the absence of these facilities is one of the greatest obstacles to entrepreneurial initiative.

There are, of course, degrees of risk-taking in underdeveloped countries, too. Entrepreneurs entering existing trades find a stock of experience on which to draw, or they may be guided by reference to similar industries. It is being said that the cotton industry in India was not treading unknown paths because the raw materials and markets were at hand and the industry copied the jute industry.[32] Almost everywhere, however, industrial enterprise encounters a

[29] Cf. *Report on Cuba*, Johns Hopkins Press for International Bank for Reconstruction and Development, 1951, pp. 47 ff., 525 ff., and *passim*. A highly interesting analysis of the structure and course of the Cuban economy is provided by Henry C. Wallich, *Monetary Problems of an Export Economy*, Harvard University Press, 1950.

[30] Cf. *Report on Cuba*, as cited, p. 573.

[31] Arthur H. Cole, *Change and the Entrepreneur*, Research Center in Entrepreneurial History, 1949, p. 106.

[32] Samant and Mulky, *op. cit.*, p. 2.

powerful disincentive in the existence of other pursuits. Real estate investment, which is considered more secure and liquid than long-term industrial investment, requires less time and specialized knowledge for management of such investment and offers an opportunity for members of other professions to participate. Businessmen find inventory investment an attractive alternative to expansion of their own, or to investment in another, business. Inventories, too, are liquid and can be used as collateral for credit; their price is bound to rise in inflationary situations, when the supply of imports is likely to diminish as a result of balance of payment difficulties.[33]

Real estate and inventory speculation and short-term commercial transactions, as well as the policy of commercial banks favoring such transactions, are the greatest traditional deterrents to industrial enterprise in underdeveloped countries. In descriptions of this situation, we note sometimes a trace of righteous indignation that "solid" investment is not preferred to "speculation," with its connotation of levity. A reason for this attitude is that instability itself induces a gambling spirit when the economy is controlled by short-term fluctuations.[34] We have also seen that short-term transactions appear safer and more liquid than long-term ventures. Perhaps the best explanation of speculative preference for short-term transactions is found in the fact that "gambling" may actually appear safer than "solid" long-term investment, precisely because it is traditional and widespread. Moreover, a wide basis of reference and experience is the best antidote against fear or generally pessimistic expectations. The professional gambler could, if he cared, actually determine probability on the basis of actuarial risk. He has entered the market many times and has found that errors in judgment cancel out, to some extent, and leave a predictable return. The industrial investor lacks this kind of experience because he starts that particular industry only once.[35] Moreover, in inflationary situations created by development spending under conditions of inelastic supply, any expectation of price rises appears actually built into the economy. No wonder, then, that nearly all arguments of security militate *quite "rationally"* against long-term industrial investment and in favor of those traditional pursuits which the puritan mind places lowest on the scale of desirability.

From the point of view of security, *profit* expectations tend in the same directions as investment choice. Short-term transactions of the

[33] Bernstein and Patel, *op. cit.*, pp. 383 ff.
[34] *Report on Cuba*, as cited, pp. 58 ff.
[35] Knight, *op. cit.*, p. 247.

types described appear not only safer but often more profitable. There is a factual basis for this belief. One of the oldest pursuits, moneylending, is widespread and lucrative. Statistics are usually lacking, but there is evidence that rates run from 18 to 60 per cent per annum and often much higher. Estimates of yield in inventory speculation run up to 70 per cent in not unusual or strongly inflationary situations. Clearly, industrial enterprises need to expect much higher returns than the rates considered satisfactory in industrial countries if they are to compete for capital with such profitable alternatives.[36]

Although statistics of profits[37] in industries of underdeveloped countries are not plentiful, there is some evidence of high industrial profits. Dividends declared by the mills managed by five leading managing agencies in India averaged 24 to 100 per cent of share capital annually from 1914 to 1928 and 8.5 to 83 per cent from 1928 to 1932.[38] According to more recent figures from Chile, those for 1943, average profits of 222 industrial stock companies were 21 per cent of capital or 16 per cent of capital and reserves.[39] In Brazil 256 companies in the state of São Paulo had a median rate of profit to invested capital of 34.4 per cent in 1942. Among this group one-third had net profits of over 50 per cent and 25 companies had profits of over 100 per cent. In 1946, 222 firms in the same state showed an average profit of 19 per cent on capital plus surplus and in 1947 an average profit of 15.4 per cent. These average figures conceal large variations, from 4.4 to 30.9 per cent in 1946 and from 8.4 to 46.5 per cent in 1947. The 286 enterprises of the Matarazzo group showed profits of 90 per cent of paid-up capital and a chemical firm 123 per cent in 1946-1947.[40]

These scattered pieces of evidence can be interpreted to mean

[36] Cf., e.g., *The Economic Development of Nicaragua*, Johns Hopkins Press for International Bank for Reconstruction and Development, 1953, p. 10; *The Economic Development of Ceylon*, Johns Hopkins Press for International Bank for Reconstruction and Development, 1953, p. 515; and *The Economic Development of Iraq*, as cited, p. 278. Many other country sources report similar or higher figures.

[37] The available data refer often to dividends declared. Additions to reserves, an important item where undistributed profits are a prominent instrument of finance, are thus not covered.

[38] P. S. Lokanathan, *Industrial Organization in India*, London, G. Allen, 1935, pp. 291 ff.

[39] Wythe, *op. cit.*, p. 225. Figures of profits, not dividends, may be calculated with an eye on taxation.

[40] Wythe, Wight, and Midkiff, *op. cit.*, pp. 176 ff. It should be realized that profits in Brazil are subject to a risk premium for devaluation. The cost of

that there is a base of high profit expectations in industries and that only such industries as give promise of great yield are actually started, although the outcome, as may be expected, does not always justify the high hopes. In many instances industrial profits do not run so high that traditional forms of investment would not be expected to offer continued powerful competition in underdeveloped countries.

It would be interesting to find out what the expectations of profit and security were in comparable stages of industrialization in countries now far more advanced. It was not possible to undertake such specialized research for the purpose of this paper, but a few items of information relating to the early American cotton industry can be recorded. Offhand, it does not seem unreasonable to believe that a large increase of productivity which lowered costs so rapidly would have made for high profit expectations among the "imitators" who followed the pioneers. A very early report sets at 30 per cent the annual profit in making jeans from flax and cotton, spun on jennies;[41] it will be noted that this experience precedes the major innovations of the Industrial Revolution.

Profit expectations are reported to have been high in the early part of the nineteenth century because the Rhode Island spinners of cotton yarn, under the powerful leadership of Almy and Brown, the "pioneers" of the industry, kept the price steady while that of cotton dropped under the impact of the embargo. The experienced firms warned of accumulating stocks but the newcomers kept coming. Oddly, they survived, because new markets were opening under the influence of the embargo.[42] Uncertainty about the size of markets is relieved by manifest opportunities offered by wars and embargoes;[43] World Wars I and II were also powerful stimulants in underdeveloped countries.

With the founding of the Boston Manufacturing Co. in Lowell in 1813, the era of the modern, large-scale cotton industry in the United States began. This company paid its first dividend of 12.5 per cent in 1817 and paid 8 to 13 per cent semiannually thereafter;

living more than doubled between 1939 and 1946. Cf. Henry W. Spiegel, *The Brazilian Economy*, Blakiston, 1949, p. 98.

[41] J. Leander Bishop, *A History of American Manufactures from 1608 to 1860*, E. Young, 1868, Vol. I, pp. 407 ff.

[42] Caroline F. Ware, *The Early New England Cotton Manufacture*, Houghton Mifflin, 1931, p. 47.

[43] For other examples see Henry G. Aubrey, "Deliberate Industrialization," *Social Research*, June 1949, pp. 180 ff.

the sum of dividends paid between 1817 and 1822 was 104.5 per cent, presumably. In addition, there were accumulated reserves from plowed-back profits. In later years the dividends were less generous but averaged 9 per cent for large companies. Dividends of the Lowell companies were 6 to 11 per cent in 1830 and 18 to 24 per cent in 1831, and new capital for the cotton industry was easy to get. A contemporary letter to one of the companies read: "The rumor of your profits will make people delirious."[44] We would not expect to find similarly sanguine statements about profit expectations in the industries of underdeveloped countries today.

THE ORIGIN OF INDUSTRIAL ENTERPRISE IN UNDERDEVELOPED AREAS

The object of investment preference and the degree of industrial enterprise, then, are largely determined, in economic terms, by expectations of security and of profitability. The question now arises, To what extent are these expectations shaped by the individual's background in distinct national or occupational groups? It may be surmised that a man's experience and specialized skill will affect his outlook and trade preferences; moreover, the strength of his initiative may well be influenced by the degree of economic security which he has.

It has been said that early industrial entrepreneurs in Europe, as distinguished from the managers and moneylenders, were men with mechanical rather than financial skills; a climate favoring orientation in the direction of productivity and creative integration is, hence, considered essential for the successful industrial entrepreneur.[45] The question may well be asked whether this applies to the "imitators" among the entrepreneurs as much as to the relatively small number of "innovators" who led the field. Conversely, it is being said that profits, especially of the inflationary type, are not productively reinvested by plantation-owners, peasants, or speculators;[46] but all available evidence points to the prevalence of so many former traders among industrial entrepreneurs in many underdeveloped countries that the outlook on time preferences and profits must still reflect their "trading complex" even in the industrial

[44] Quoted in Ware, *op. cit.*, pp. 66-156.

[45] Bert F. Hoselitz, "Entrepreneurship and Economic Growth," *American Journal of Economics and Sociology*, October 1952, pp. 106 ff.

[46] "Some Financial Aspects of Development Programmes in Asian Countries," *Economic Bulletin for Asia and the Far East*, United Nations, January-June 1952, p. 9.

field.[47] A glance at the origin of indigenous industrial enterprise in India, the Middle East, and Latin America will bear this out.[48]

The managing agency system in India originated in British trading companies which expanded into market-related industries. Indian traders followed in their footsteps; merchants in Bombay who had made money in trade were pioneers in the textile industry, as had previously occurred in Lancashire. It is perhaps significant that the first successful cotton mill was established by a Parsi. A few wealthy merchants' communities, such as Parsis and Bhatias, were now prominent in industry.[49] It may, however, be premature to conclude from this fact that cultural characteristics are the prime determinant of such an attitude. Parsis and the Hindu merchant caste of Marwaris have different religious and social backgrounds. What they have in common is wealth and business experience acquired in related pursuits. The first is important as a source of capital and of credit; the second provides a major incentive unavailable to the uninitiated: these people had their market ready-made for them by their past trading activities.

Similarly, cotton merchants in Egypt invested some of their profits first in ginning and pressing cotton, later in spinning and weaving it. Industrial promotion was not always limited to closely related trades. Profits from the soft-drink and wine trades went into cigarette manufacturing and monopoly profits from the alcohol industry went into paper-making—examples of the self-propagating power of industrial enterprise. Initiative was also provided by retired British officials who remained in the country and went into business with local interests. A depression in agricultural prices and the proven profitability of industry under protection eased a transfer from investment preferences for land. The Bank Misr, under government auspices, introduced the middle class to security investment. Other promoters came from politics and the civil service.[50]

This experience is, in part, borne out in other countries of the Middle East. The first initiative, capital, and ability were usually provided by merchants and financiers, rarely by landlords or by craftsmen. An important characteristic element also entered the picture: immigrants from other countries. In Greece a number of

[47] *The Economy of Turkey*, Johns Hopkins Press for International Bank for Reconstruction and Development, 1951, p. 160.

[48] Foreign investment is not discussed in this context though its importance as a stimulant is fully recognized.

[49] Lokanathan, *op. cit.*, pp. 15 and 22.

[50] El-Gritly, *op. cit.*, pp. 374 ff.

refugees from Asia Minor established small industries after World War I. In Egypt, Syrians, Armenians, Jews, Greeks, and other Europeans played an initial role, with Egyptians later taking over as the most prominent group. In Turkey the expulsion of the Armenians and Greeks, traditional trading groups, was probably responsible for the lack of initiative, which had to be provided by strong government action. In Lebanon, Christian traders and returning emigrants were the source of industrial enterprise, while in Syria the Moslem traders were in the lead and the Christians turned to the professions. There is only one landlord among Syrian industrialists, hardly any in Iran.[51]

The importance of foreign immigrants for Latin American industry was, and still is, considerable. Lebanese and Syrians, starting as merchants and importers, today own about 500 large industrial enterprises in Brazil.[52] Itinerant traders, *mascates*, of Italian, later of Syrian, origin started small stores in the interior, progressing to stores in large cities and finally to industries. Syrian initiative is responsible for much of the textile industry in Brazil and Colombia.[53] An Argentinian syndicate which, in addition to manufacturing matches and explosives and establishing a bank, recently acquired exclusive rights for erecting a tin smelter in Bolivia is headed by a textile manufacturer of Syrian extraction.[54] Another instance of such "foreign investment" in Latin American countries is provided by a rayon-weaving plant established in Colombia by the Brazilian Matarazzo interests. The story of Matarazzo himself, referred to earlier in this paper, is an illustration of an immigrant's success in developing an industrial empire by expanding from one trade into lines related to it.[55]

The activities of Spanish and French investors in Mexico are another example of foreign investment's becoming national in character by virtue of the investor's settlement in the new country. The *Barcelonetas* of French origin contributed much to Mexican industrialization of the last quarter of the nineteenth century, and there are records of French families of earlier immigration periods who are still prominent in the country. Their path usually progressed

[51] Charles Issawi, "The Entrepreneur Class in the Middle East," paper in the volume for the Conference on the Near East, Social Science Research Council, October 1952, to be published by Cornell University Press in 1955. I am grateful to Mr. Issawi for making this paper and other material available to me, and for much other stimulation.

[52] *Ibid.* [53] Wythe, *op. cit.*, pp. 164 and 271.

[54] *New York Times*, December 7, 1952, p. 36.

[55] Wythe, *op. cit.*, pp. 163 and 271.

from retail trade to wholesale trade, importing, and finally manufacturing. The Spanish were prominent in the cotton textile industry, contributing, in 1930, 26 per cent of the managers and 39 per cent of the capital. But this was not absentee investment. These people were residents of the country; they did not remit their profits but reinvested them in Mexico in business, which took on Mexican character.[56]

This material, however sketchy, seems relevant for our purpose. Did these foreign elements succeed because they were members of a distinct national group or because they brought with them, in addition to some capital, certain skills and experiences which were also finally responsible for dynamic expectations in the industrial field? The intensity of the dynamism may be explained by the necessity of "making good" in the new country.[57] This driving quality is always resented by the nationals, no matter whether it is possessed by *Turcos* in Latin America, Jews, Italians, Chinese, or Japanese. In spite of their different origins and cultures these immigrants appear to have had one thing in common: they were familiar with business, had acquired markets for specific merchandise they knew well, and had some capital, their own or borrowed from relatives or other members of their groups. Moreover, they possessed an international outlook and could look to friends in many foreign countries for technical advice, sources of equipment, and other pertinent data. In other words, in several important directions the immigrants' knowledge and skills were greater, the degree of their uncertainty smaller, and their economic horizons wider than was true of the "natives." This makes for more confidence and optimistic expectations and may thus explain more successfully than can cultural characteristics the entrepreneurial initiative encountered among these groups.

3. *Determinants of Investment Decisions in Underdeveloped Countries*

In this part of the paper the investment decision is divided according to the specific considerations which enter into it. A prospective entrepreneur will have to weigh the size of the market, the

[56] *Ibid.*, pp. 294 ff.

[57] Moreover, the ever-present fear of discrimination in which such groups live might make the risks of industrial investment appear smaller than they would appear to groups basically more secure. The author is indebted to H. W. Singer for this comment.

conditions of entry into a prospective industry, and the availability of resources—raw materials, power and transportation, capital, and labor, including degrees of skills—in order to estimate, or to form some kind of opinion about, productivity and costs, competition and prices, and, finally, the chances of profit. In the last resort, he will have to bring all these considerations to bear on his choice of alternatives regarding size of plant, type of technology, and organization. These latter elements, which form the object of the investment decision, will be briefly examined first to provide the focus for the following discussion of the determinants in their factual institutional framework.

OBJECTS OF INVESTMENT DECISIONS

The problem of size of firm and plant can be approached from various angles: Size is in part determined by the demand for the product and, in turn, determines the expected share of the market. The availability of resources, including capital, labor, and skills, is a major factor. These factors will have to be weighed against considerations of efficiency and cost, in relation to the expected price. The purpose of this section is to put these cross relations briefly into perspective,[58] while the underlying factual conditions will be set forth in the next section.

Limitations of the market effectively restrict the size of plant if year-round production in a large plant would exceed total annual consumption. Production will not be undertaken if the smallest efficient unit would produce more than visible demand justifies.[59] In other instances, the aim of least cost may conflict with the consideration of security. A plant with smaller capacity is less vulnerable if demand contracts, cyclically or otherwise, since smaller plants, using less specialized equipment, are more flexible in adapting themselves to changes in demand. Prevalence of small plants makes for greater elasticity of expansion since the added capacity of a large plant may exceed the growth potential of the market; an additional small plant, however, could be deemed to have a better chance of success.

In relation to capital, smallness may be a matter of choice or

[58] Many of these issues have been discussed in another paper of mine, "Small Industry in Economic Development," *Social Research*, September 1951, pp. 269 ff.

[59] Cf. *The Basis of a Development Program for Colombia*, Johns Hopkins Press for International Bank for Reconstruction and Development, 1950, p. 93, regarding the impossibility of starting the manufacture of electric light bulbs.

it may result from financial limitations. The latter do not necessarily prevent the establishment of an enterprise though experience shows that financial difficulties tend to persist. It is difficult for small firms to obtain additional capital.[60] On the other hand, under conditions of capital scarcity in underdeveloped countries, a decision in favor of a small plant is preferable to a negative one. If the only choice were between a large plant and none, it is all too likely that the capital would be used for traditional unproductive pursuits. Risk factors seem to favor a small commitment over a large one, and the greater flexibility of small plants may also increase confidence. Clearly, entrepreneurial initiative is related to the size of investment.

In discussing efficiency and size several criteria should be applied: technical, managerial, financial, and marketing.[61] These will be discussed in the next two sections.

The choice of technology is fraught with difficulties resulting in "technological uncertainty" about the quantitative relation between future inputs and future outputs, especially in planning beyond the range of the firm's engineering experience.[62] The knowledge of existing alternatives is not easily obtained in underdeveloped countries or is obtained only at considerable cost for foreign expert advice or travel; this situation favors large firms able to afford such additional initial expenditure. Moreover, shortage of capital and ample supply of labor militate in favor of less capital-intensive techniques in underdeveloped areas than in industrial countries.[63] It is a matter of argument whether the requisite techniques are available or have to be created anew after having become obsolete in industrial countries. In many industries the choice between practicable alternatives is much greater than is generally assumed. It should also be realized that the selection of proper productive equipment is no more important than plant organization: layout, material flow, integration of processes, process specialization, etc.[64]

[60] Cf. El-Gritly, *op. cit.*, p. 497, and Richard C. Osborn, "Efficiency and Profitability in Relation to Size," *Harvard Business Review*, March 1951, p. 91. In the United States the equity capital of small firms is only about one-half of total assets, compared with two-thirds to three-quarters in the case of large corporations. Credit-rationing makes additional borrowing also more difficult for small firms.

[61] E. A. G. Robinson, *The Structure of Competitive Industry*, rev. ed., London, Cambridge University Press, 1953, p. 17.

[62] Lange, *op. cit.*, p. 71, and Hart, *op. cit.*, p. 66.

[63] Cf. Singer, *op. cit.*, p. 25, and *Measures for the Economic Development of Underdeveloped Countries*, United Nations, 1951, p. 31.

[64] Cf. Corwin Edwards, "Brazil's Economy in the War and After," in *Economic Problems of Latin America*, Seymour E. Harris, editor, McGraw-Hill,

The choice of techniques and equipment has a bearing on problems set forth earlier in this paper. Smaller or less elaborate equipment costs less, and hence the capital requirements and risk involvement are smaller. Such equipment, as a rule, is easier to operate and requires less skilled labor than highly mechanized automatic machinery, which needs care and maintenance, involving additional capital and cost for spare part stocks and skilled mechanics. More elaborate equipment may have greater rated output, but this advantage is frequently voided by deficient skills and plant organization. Greater flexibility, inherent in less specialized equipment, may justify a sacrifice of efficiency in favor of a reduction of risk; thus it may pay to adopt devices, such as multiple-use design and shorter-life equipment, which increase flexibility or decrease risk involvement, in line with a foreshortened "economic horizon."[65] All these considerations apply not only to productive machinery but to auxiliary equipment as well.

The form of organization of the individual firm and that of the whole industry have considerable bearing on entrepreneurial initiative.[66] This section discusses the role of the corporation, aspects of centralization, integration, and marketing.

For the purpose of this paper, some features of the corporate form of business are of special interest. As a risk-reducing device it limits each investor's commitment to his share of the capital. On the other hand, unless his share is large, he forfeits the security of management control; protection of stockholders' interests has not reached a high level in many underdeveloped countries, and disregard of them in a number of instances obstructs the growth of security markets. Corporations, built upon the ability of managers rather than on the whim of individuals, can take the long view which industrial initiative and management require. On the other hand, the small number of potential investors in underdeveloped areas makes for close control of shares, often within families or groups of friends. This tendency and a desire for anonymity create diffidence in potential buyers of securities who lack basic information. The desire for anonymity also causes shares to be registered in the bearer's

1944, p. 279. Much factual material may be found in *Labour Productivity of the Cotton Textile Industry in Five Latin-American Countries*, United Nations, 1951.

[65] Cf. Abramovitz, *An Approach to Price Theory*, as cited, p. 81, and Yale Brozen, "Adapting to Technological Change," *The Journal of Business of the University of Chicago*, April 1951, p. 123.

[66] Cf. Abramovitz, "Economics of Growth," as cited, pp. 139 ff.

name in many underdeveloped countries, which makes tax evasion easier, thereby, perhaps, providing an investment incentive.

But the growth of the corporate form is slow in most countries. In Argentina, for example, the percentage of firms organized as stock and limited liability companies increased only from 6.3 per cent in 1935 to 8.1 per cent in 1943. In India, on the other hand, the joint stock company has been a feature of industry from the latter's beginning.[67]

Internal organization of the firm is related to size. Large firms can employ highly paid specialists, but increased specialization leads often to loss of coordination and, hence, of efficiency. Decisions are reached more easily and quickly in small firms, making for greater flexibility.[68] If ownership and management are combined in an individual, or in a small number of individuals, entrepreneurial initiative tends to be more immediate and personal than in a corporation with widely dispersed and anonymous holdings. Among individualistically minded people the lack of this close identification may well be a deterrent to corporate investment.

A large firm is plainly favored by its preferred position as a capital risk, as well as by the scarcity of entrepreneurial talent. But over and above the limited supply of very specialized talent other individuals can be used by smaller firms. A combination of activities in vertical or lateral integration, formal or informal, is favored by the scarcity of external economies. Difficulties in obtaining raw materials may compel a firm to expand in that direction or to build services taken for granted elsewhere. Thus a sugar-manufacturer in Egypt built his own railway and a river fleet. A new rayon mill had to install a complete mechanical workshop capable of making its own spare parts. Excess capacity in one direction, perhaps due to indivisibility, may lead to investment in successive stages.[69] It will, however, be realized that these factors contribute to a condition of quasi monopoly which makes the creation of other industries in the same field more difficult.

In the field of marketing, finally, advantages of large-scale organization are least pronounced. The larger the volume of sales needed to dispose of current production, the higher the sales ex-

[67] Bernstein and Patel, *op. cit.*, p. 391; *The Economic Development of Ceylon*, as cited, p. 82; Henry C. Wallich, "Fiscal Policy and the Budget," in *Economic Problems of Latin America*, as cited, p. 124; and Wythe, *op. cit.*, p. 105.

[68] Robinson, *op. cit.*, p. 38.

[69] Charles Issawi, *Egypt at Mid-Century*, London, Oxford University Press, 1954, Chap. 7. Information used with the author's permission.

penditure and other overhead costs. This trend is clearly visible in the United States, where a 1939 survey of corporations disclosed that sales per dollar of invested capital increased inversely with the size of total assets, from $.80 for corporations with more than $5,000,000 in assets to $5.42 for corporations with less than $50,000 in assets.[70] This trend is probably less pronounced in countries with less elaborate sales services, but the situation is in line with the observation that overhead capital and costs of small industries need not be relatively as large as those of large firms.[71] In other words, a less elaborate, cumbersome, and costly organization presents fewer deterrents to a positive investment decision. Incidentally, some of the benefits of large-scale organization can be made accessible to small operators by cooperative services in the fields of credit, buying, and marketing, as experience in the Far East demonstrates.

THE SIZE OF THE MARKET

Before making a final decision about the size of his commitment, technology, and organization, the prospective entrepreneur will have to consider the size of the market in two directions: the size of total demand for the product and the share of the total market which will be the target of the contemplated enterprise. Unless the new venture is to be the first of its kind in the country, the type and intensity of competition are important in calculating cost and prices. Estimation of the potential market is difficult in underdeveloped countries. Moreover, it requires assumptions as to whether the past level of incomes or its recent rate of growth will continue.[72]

These latter alternatives are very important because all observers are agreed that markets in underdeveloped countries are restricted by low incomes, which are due to generally low productivity. Thus the demand of the largest sector of the population is restricted to a few essentials, while that of the small wealthy group is oriented toward imports and is often too small to warrant domestic production. The inducement to invest in any individual industry is therefore restricted by generally low purchasing power.[73] Shifts in the

[70] Cf. *Private Capital Requirements*, Board of Governors of the Federal Reserve System, 1946.

[71] See Aubrey, "Small Industry in Economic Development," as cited, pp. 301 ff.

[72] Hart, *op. cit.*, p. 76.

[73] For a more elaborate theoretical treatment of the problem see Ragnar Nurkse, *Some Aspects of Capital Accumulation in Underdeveloped Countries*, Fiftieth Anniversary Commemoration Lectures, Cairo, National Bank of Egypt, 1952, pp. 4 ff.

distribution of income, brought about by inflationary trends, further depress the market in low-priced consumer goods industries on which demand concentrates when standards of living rise.[74] However, by raising the purchasing power of agriculture the base for industrial production could be increased, as industrialists in Mexico have realized.[75]

Among the palliatives sought to increase the domestic market, protection against foreign imports is almost universally adopted. High tariffs are supplemented by quantitative controls in the form of import or exchange restrictions, including a form of rationing in which a government may compel an importer to buy a standard ratio of domestic products. Such a law is on the books of Ceylon[76] and a similar practice has been used in Venezuela. While protection for industry is certainly necessary in its early stages, it also tends to raise prices, a problem left for more detailed discussion later. In the present context the question arises whether a policy of generally lower prices based on reduced markups would not be effective in increasing the volume of production, thereby raising aggregate incomes all around. Such an extension of markets would also offer greater opportunities for specialization and division of labor, thus increasing productivity and, indirectly, incomes.[77]

Low purchasing power and small markets have held the center of attention for so long that the frequent absence of industries to satisfy visible demand tends to be overlooked. In Nicaragua, for example, 4 to 5 million square yards of plain cotton goods which are now being imported could be made locally. In the absence of modern slaughtering and processing facilities the local price of crude lard is often higher than that of meat; hence, a large part of consumption is imported.[78] It may be concluded from these and other examples that the absolute size of the market is not necessarily the chief limiting factor; the difficulty of estimating demand in satisfactory fashion, for instance, may be more important.

[74] Bernstein and Patel, *op. cit.*, p. 384, and *The Economic Development of Iraq*, as cited, p. 279.

[75] Cf. Sanford A. Mosk, *Industrial Revolution in Mexico*, University of California Press, 1950, p. 49.

[76] *Basic Instruments and Selected Documents*, Geneva, General Agreement on Tariffs and Trade, 1952, Vol. II, pp. 66 ff.

[77] *The Economic Development of Guatemala*, as cited, p. 98, and *The Basis of a Development Program for Colombia*, as cited, p. 92.

[78] *The Economic Development of Nicaragua*, as cited, p. 120.

CONDITIONS OF ENTRY INTO THE INDUSTRY

The smallness of the market or uncertainty about the actual size of demand can be countered by a special kind of protection and inducement which actually guarantees a market to an entrepreneur willing to start a new industry. In many countries new industries cannot be established without the consent of the government, given either informally or through the issuance of licenses or privileges (*patentes*). On the ground that prospective competent newcomers will not be attracted unless they can operate without competition for a period of time, exclusive franchises are being granted to desirable new industries. This device is not new, of course, for it played a role in early European industry.

In Uruguay, for example, over 100 concessions with exclusive privileges for nine-year periods have been granted since 1921. In Panama, in 1937, exclusive rights to process milk were granted, along with prohibitions of the import of competing products. More recently, the Haitian government granted a twenty-five-year monopoly for the manufacture of soap. In Jamaica special protection amounting to a virtual monopoly was accorded to such industries as matches, condensed milk, and cement.[79]

These arrangements create a monopoly in order to attract new industry. Other measures are designed to protect existing industries against the competition of newcomers; their effect is static since no new industries are created. In Cuba government intervention in the cigarette industry, for example, takes the form of allocating production quotas, increasing them as demand increases but keeping new factories out. In Jamaica the government not only protected the copra industry from new competition in its own products but also guaranteed not to grant any licenses to manufacture substitutes or by-products, such as lard or margarine and soap, or to permit the import of additional machinery to make them. Several countries, including Chile and Mexico, have laws against overproduction born in the depression of the 1930's. In designated trades, like textiles, new industries can be established only with government approval.[80] In Argentina two companies received special privileges when establishing plants to make antibiotics and hormones while, so far, no similar concessions have been granted to competing companies.

[79] Wythe, *op. cit.*, pp. 73 ff., and *The Economic Development of Jamaica*, Johns Hopkins Press for International Bank for Reconstruction and Development, 1952, pp. 86 ff.

[80] *The Economic Development of Jamaica*, as cited, p. 236; Wythe, *op. cit.*, pp. 218 and 306; and Mosk, *op. cit.*, p. 97.

This method of attracting industry carries a danger of self-defeat by increasing output only, at the expense of future growth and through lowering real incomes by high prices.[81] Initially, the protection granted to new investors tends to eliminate a major element of doubt regarding the market, replacing it with the security of a *de facto* guarantee. Later, however, expansion and competition by new entrants are effectively negated; an inducement to a single new investor is thus turned into discouragement to others. Moreover, such *de facto* monopolies are more effective than monopolistic combinations in keeping prices high since there is no effective competitive mechanism to bring them down; this, in turn, keeps the market small and serves to justify further demands for protection. Finally, fundamentally the most dangerous effect is perhaps the disincentive to efficiency of operations. In the absence of competition and at a comfortable price level there is no apparent need to lower costs by improving productivity.

The risk of enterprise is also accentuated by rigidities affecting exit from the industry. For instance, Cuban law, anxious to protect workers against dismissal, does not permit liquidation of an enterprise without authorization by the secretary of labor, which can be obtained only with great difficulty. If the enterprise were sold, the labor contract would be binding on the successor, who would thereby be saddled with obligations beyond his control. Plainly, such a situation increases the risk of enterprise since the ultimate escape in case of failure leads to prolonged or costly agonies.[82]

AVAILABILITY AND MOBILITY OF RESOURCES

In underdeveloped countries the prospects of enterprise may be diminished by the lack of necessary resources other than raw materials and by government policies regarding resources. This is true, in particular, in the case of capital and credit. While common labor is usually plentiful, skilled labor and able technical and managerial personnel are often scarce.

Availability of Capital. Before discussing the supply side, which usually receives more attention, it is advisable to scrutinize demand in some detail. Comparing capital needs in underdeveloped areas with those for identical enterprises in industrial countries, substantial differences of two kinds are found: capital requirements are higher in underdeveloped countries, and it is, at the same time, more dif-

[81] Cf. *The Economic Development of Iraq*, as cited, p. 40.
[82] Cf. *Report on Cuba*, as cited, p. 140.

ficult to determine them with reasonable accuracy. Several factors combine to make such *capital requirements* high. In the first place, nearly all equipment has to be imported over long distances since underdeveloped countries are rarely equipped for such production. The cost of shipping and insurance is higher the greater the distance from the port of arrival and the less developed the intermediate transportation and unloading facilities are. Unfamiliarity with cheap sources of supply, the need to obtain costly foreign advice, and the profits of middlemen often add to the initial outlay.

The absence or the high cost of essential services, commonly known as external economies, quite frequently compels industrialists to provide their own power facilities, sometimes even their own transportation facilities, and such other services as those for repair. Large inventories are required because a network of industrial supplies is still lacking; raw materials have to be stored in the absence of efficient forward markets. Intermediate products like chemicals have to be imported, and, to meet emergencies, larger stocks need to be kept than would be required in more advanced economies. These shortcomings raise the requirements for working capital in addition to fixed capital. In other words, the lack of the Marshallian external economies of an industrial environment increases the capital cost of new industries, as is attested by many studies.[83]

As a result of these many shortcomings rooted in underdevelopment itself, it is crucially important, yet extremely difficult, for a new enterprise to estimate its capital requirements correctly. This calls for considerable advance knowledge of all ramifications of the problem and presupposes a degree of skill and experience rarely found in underdeveloped countries. Under these conditions correct estimation of capital needs is a major difficulty for a prospective industrialist, in addition to other uncertainties; by the same token, this difficulty adds to the risk of failure if the initial requirements are underestimated and more capital cannot be obtained after the inadequacy becomes evident. Initial mortality from this cause is often high. Additional capital, if secured, may be extremely costly. Undercapitalization is, in fact, a frequent phenomenon. Working capital, in particular, tends to be kept low, especially where other attractive investment possibilities exist; as long as the cost of construction is covered, working capital is supposed to take care of

[83] Cf. *The Economic Development of Guatemala*, as cited, p. 98, and *The Economic Development of Iraq*, as cited, p. 300.

itself somehow—by credit if necessary. Miscalculation is a more frequent cause of failure than actual shortage of capital, on which the blame is usually placed.[84]

A great deal can be done by government to lessen the extent to which the lack of essential services increases capital needs. This is realized in most developing countries, where high priority is given to transportation, communications, and power. These activities are so widely observed that specific documentation is hardly required. Attention should be drawn to a device less familiar in underdeveloped countries: the Industrial Development Co. of Puerto Rico went so far as to provide factory buildings for new industries from the mainland at favorable lease or purchase terms; this was a rather expensive measure for the government, its cost having been estimated at as high as $2,000 per worker employed.[85] It could be argued that this capital assistance goes too far if extended to all comers, irrespective of their own resources. On the other hand, such a contribution does more than relieve financial stringency. It removes one of the major elements of risk in investment decisions: by reducing capital needs it scales down the total capital involvement and does away with a major operation which must appear particularly irksome and risky to the uninitiated.

Prior to discussing specific sources of *capital supply* it may help to recapitulate the origin of savings, from which, in the last analysis, capital is formed. Private savings are highly concentrated in the hands of a comparatively small group of high-income-earners in underdeveloped countries. In line with population structure, a smaller proportion is of "saving age," roughly identified with the twenty- to sixty-five-year group. A part of savings are hoarded, invested abroad, or used directly by the savers for residential and commercial construction.[86] Inflationary pressures reinforce this tendency. Another large part of savings accrue as business savings and are used for reinvestment, again not contributing to free availability on the capital market.[87] It could be argued that reinvestment is not the

[84] Lokanathan, *op. cit.*, p. 150; Samant and Mulky, *op. cit.*, p. 97; *The Economic Development of Nicaragua*, as cited, p. 116; and El-Gritly, *op. cit.*, p. 377.

[85] Harvey S. Perloff, *Puerto Rico's Economic Future*, University of Chicago Press, 1950, p. 106, and *The Economic Development of Jamaica*, as cited, p. 84.

[86] An estimate for Brazil states that more than 60 per cent of savings were used for construction in 1947. *Report of the Joint Brazil-U.S. Technical Commission*, as cited, pp. 134 ff.

[87] "A Report on the Process of Inflation in Chile," mimeographed, Inter-

most desirable form of capital formation because it starves the capital markets of needed funds for new ventures while centering growth in existing industries. On the other hand, we cannot be sure that otherwise this capital would really flow into productive activities, considering the notorious preference of individual investors for other types of investment. Moreover, in Great Britain and also in the United States, historically self-financing has played an important part in capital formation; it was estimated that self-financing contributed nearly three-quarters of United States capital formation even in 1923-1929, when capital markets were also very active.[88]

Deficient channeling of savings into productive private investment remains the outstanding feature of capital formation in underdeveloped countries. To give only one example, it was estimated that in Guatemala not more than 20 per cent of total capital formation consisted of private productive investment, while about 40 per cent was public investment and the balance nonproductive private investment.[89] Regarding private investment, there is a relationship between investors' confidence and the weakness of capital markets. The success of certain managing agencies in India was due to the fact that their names rather than the soundness of the proposed schemes attracted capital; in fact, their guarantee was often a prerequisite for loans. A similar function is performed by private industrial banks, like the Bank Misr in Egypt, or by such public agencies as Mexico's Nacional Financiera; it consists of attracting funds and, in a way, acquainting the public with the bank's or agency's affiliated ventures.[90]

The weakness of security markets is too well known to require much elaboration. Among the reasons, partly mentioned before, are preference for the liquidity and security of real estate investment; unfamiliarity with securities, reinforced by the tendency of corporations to control existing stock closely (for instance, only sixteen

national Monetary Fund, 1950, p. 62, and *Report on Cuba*, as cited, p. 516. In regard to hoarding it is relevant to note that seasonal instability and frequent price swings are responsible for strong liquidity preference resulting in idle bank balances. On the other hand, this tendency cushions the economy against inflationary trends which would otherwise arise from large export proceeds received within short time periods. Cf. *ibid.*, p. 532.

[88] George Terborgh, *The Bogey of Economic Maturity*, Machinery and Allied Products Institute, 1945, p. 157.

[89] *The Economic Development of Guatemala*, as cited, p. 278.

[90] Lokanathan, *op. cit.*, p. 24; Samant and Mulky, *op. cit.*, p. 100; and El-Gritly, *op. cit.*, p. 455.

securities of those quoted on the Rio de Janeiro exchange were traded at least once a year from 1938 to 1944); lack of interest in security markets on the part of banks and other financial institutions; and disorganized bond markets, related to poor fiscal administration. In some countries, such as India and Egypt, British influence brought about early familiarity with the joint stock system, but the stock markets of many Latin American countries languished, registering only recently some sizable advances from low levels. The volume of transactions on the exchange of Mexico City increased sixfold from 1947 to 1951, and, what is more important, the share of stocks in the total grew from 12 to 22 per cent, that of industrial stocks from 7 to 17 per cent. In Colombia, only forty-nine corporations were registered on the stock exchange in 1939, compared with ninety-four in 1949; the capital secured by new issues increased, but only 20 per cent stemmed from new issues, the rest coming from retention of earnings. In Colombia, too, the turnover on the stock exchange concentrated on a very few well-known securities. In the first six months of 1949, six stocks accounted for 80 per cent of all transactions, two for 75 per cent.[91]

A factor contributing to the lag in capital markets is lack of interest on the part of institutional investors, e.g. insurance companies and autonomous government agencies, such as social security institutes. Their traditional preference for real estate finds justification in considerations of security against inflation. On the other hand, evidence is not lacking that the danger of inflation may cause flight into equities once the institutional framework exists.[92] By and large, however, financial initiative is restricted to a small number of wealthy families and individuals who take a large share of new issues by private placement, with preemptive rights to new issues in order to keep full control.[93]

Prevailing credit policies increase the tendency of investment to flow into unproductive activities. Commercial banks favor commercial transactions for a number of reasons related to considerations of security and profitability. By preference, credit is given to old and well-established firms, most of which are engaged in commercial and financial pursuits; a personal element also enters into this preference, for bankers and merchants belong frequently to the

[91] *Report of the Joint Brazil-U.S. Technical Commission*, as cited, p. 151, and *The Basis of a Development Program for Colombia*, as cited, p. 57.

[92] This was a factor in Egypt in World War II. El-Gritly, *op. cit.*, pp. 380 ff.

[93] *Ibid.*, p. 403.

same small group of men whose wealth was made in just these traditional types of business. As stated previously, the availability of collateral is also an important consideration of security; real estate and inventories are considered both liquid and secure, but they are typically related to traditional enterprise and not to new industries.

Security and profitability merge into motivations determining the length of the credit period. A short-term commitment offers the security inherent in mobility and flexibility. High rates of interest can be charged because short-term commercial and real estate transactions, including speculation, are notoriously profitable. Clearly, a new industrial venture, and many an established one as well, can ill afford to pay upwards of 12 per cent for its accommodation. Moreover, it is not healthy for industry to operate with short-term credit, since neither fixed nor working capital can be spared in times of stringency if the credits are not renewed.

Hence, commercial banks do not as a rule contribute very much to alleviate shortages of capital for industrial enterprise. Attempts at government direction of credit for productive purposes have been successful only to a limited extent, partly because a line is hard to draw and enforcement is difficult to achieve. Mexico experimented with a mixture of direction and credit restriction when increased reserves, required against inflated export proceeds, were relaxed in favor of desirable investment or credit. In practice, most underdeveloped countries have found it necessary to channel public credit into agricultural and industrial ventures which have been considered as being in the national interest.[94]

Availability and Mobility of Labor. Although a sufficient labor supply is usually taken for granted in densely populated countries, at some stage of industrialization obstacles may appear. Japanese industry experienced considerable trouble in securing sufficient labor and had to make elaborate and costly efforts at recruitment. Mobility of labor cannot be related solely to income differentials. No matter how poor living conditions may be in the village, the peasant or his family is frequently unwilling to leave the land. Fear of the unknown and of reduced security in alien surroundings looms large; if there is little to share in the village, it seems at least secure.

[94] Cf. *Report on Cuba*, as cited, pp. 136 and 597; Bernstein and Patel, *op. cit.*, p. 384; Adler, *op. cit.*, p. 596; *Review of the Economic Situation in Mexico*, Banco Nacional de Mexico, March 1953, pp. 3 ff.; and the many specific references contained in most country reports.

Such considerations of economic and emotional security, related to status system and social structure, impede the flow of workers to industry; they are also responsible for abandonment of industrial work and a return to the village, resulting in high labor turnover or at least in absenteeism. The creation of an industrial labor force, implying major changes of habits and attitudes, is a slow process, only partly related to wage incentives.[95]

When industry develops in underdeveloped areas new difficulties arise in labor relations, similar to those that arose in industrial countries not so long ago. A significant difference lies in the relative strengths of the contending elements and the alignments of political forces behind them. Labor unions had, and still have, a hard fight for recognition; in Latin America, for example, where industry has gained a position of importance, labor seeks the backing of the government. Affinity between labor and other political forces looking for change as an instrument of advancement led labor to positions of influence and power unknown in the early industrial history of other countries. The speed of this development and the rivalry of extremist movements are responsible for a lack of political sophistication on the side of labor; this it matched by a legalistic attitude toward labor problems on the part of employers and, often, of government administration, to the exclusion of economic and human aspects.[96]

These attitudes of labor can be explained by past abuses when governments tended to side with employers. Seasonal and cyclical instability makes for blind insistence on job security, sometimes ignoring economic reason or personal equity. Technological change is opposed, in the belief that reabsorption of displaced labor will be prevented by the lack of entrepreneurial initiative in a sluggish economy. This attitude results in make-work practices, overstrict seniority requirements, and excessively rigid job tenure. These difficulties are frequently stressed by employers, in addition to alleged bias in the administration of labor laws. There appears to be some evidence of the practical impossibility of discharging workers for any reason, no matter how sound, which results in the freezing of labor relationships to such an extent that mobility of labor is reduced

[95] For an elaborate treatment of the subject see Wilbert E. Moore, *Industrialization and Labor*, Cornell University Press, 1951; see also *The Economic Development of Ceylon*, as cited, p. 522.

[96] Cf. *Report on Cuba*, as cited, p. 361.

well below the minimum required for purposeful development.[97] Clearly, such rigidity greatly increases the uncertainty and risk of new enterprises by barring rapid adaptation to unforeseen difficulties. Knowledge of this difficulty is a deterrent to positive investment decisions, by adding rigidity to other risk factors and by reducing hope of high productivity. These conditions, it is hoped, will be gradually overcome inasmuch as some groups of employers have adopted more progressive attitudes, which in turn lead to a more understanding response by labor.[98]

Availability of Skills. The absence of skills on all levels is a symptom of underdevelopment and a deterrent to new ventures. If the importance of this human resource is not recognized from the outset, its absence is soon felt in the loss of efficiency and retardation of progress, decreasing the profit of existing enterprise and increasing the risk of those who venture forth in ignorance.

In most underdeveloped countries, even where common labor is plentiful and willing to join the labor market, there exists a lack of trained workers; moreover, such a shortage need not be general to handicap development as long as it persists in some vital occupations. The problem defies quick solution because its roots lie deep in the agrarian structure of backward economies; lack of general education is as important as failure to recognize the need for vocational training as a public responsibility. Rapid progress is now being made in understanding this problem, but its solution is a long and costly process. Hence, new industries have to train a great part of their own labor. This burden increases the cost of doing business and raises the capital outlay, creating an element of uncertainty and a risk of waste if the worker should leave his job after training. This risk becomes very real if pirating becomes an established practice because apprenticeship is discouraged by labor regulations; e.g. in Cuba apprentices have to be paid full wages while in training and cannot be discharged after six months' employment.[99]

[97] *Ibid.*, pp. 59, 149, and 366 ff., and *The Economic Development of Guatemala*, as cited, p. 98.

[98] *Report on Cuba*, as cited, p. 376, and Mosk, *op. cit.*, p. 28.

[99] *Report on Cuba*, as cited, p. 141; *The Economic Development of Ceylon*, as cited, p. 511; and Mosk, *op. cit.*, p. 264. A comprehensive picture of the need for vocational education, its preconditions, and the difficulties confronting it may be found in *Vocational Training in Latin America*, Geneva, International Labour Office, Studies and Reports, New Series, No. 28, 1951. The role of immigrants as a supply of skilled labor should not be underrated: Italians brought

In the higher and more specialized skills, the difficulty ceases to be one of large numbers and becomes one of a shortage of foremen or other supervisory personnel. Again the lack of general education proves to be a major handicap. Illiterates cannot receive written instructions, select repair parts, maintain material control, or attend advanced in-training classes. Dislike of manual labor among the educated is also a deterrent factor. Foreign companies are frequently successful in providing technical training on various levels in underdeveloped countries, thus forming a nucleus of skills for the economy.[100]

In the technical field another difficulty is added to the shortage of facilities for higher education: management lacks understanding of technical needs and how to fill them. A lack of comprehension of technical planning is not surprising, considering the background of entrepreneurship in underdeveloped countries and the disinclination to take a long view. It is not easy for a former merchant to see why he should pay large salaries for a technical expert, instead of buying some kind of machine offered to him and putting it into immediate operation; efficient plant management is thus rarely found. Regulations against foreign labor often make it difficult to hire or retain foreign technicians for a long enough period of time. Lack of confidence in technical management speaks for the establishment of advisory services and technical training facilities by governments.[101]

Industrial managerial skill is also short in underdeveloped countries. Alert and informed entrepreneurs are found, of course, but the requisite attitude of patient long-term planning is often stunted by lack of industrial experience. Perhaps industrial entrepreneurship need not be as specialized in underdeveloped countries as elsewhere, but even the basic techniques of business administration, scientific management, statistics, costing, and of personnel administration are frequently unknown. This results in difficulties of control and coordination, arising also from inability to delegate responsibility and authority. Differences in productivity can be traced to the quality of administration, initiative, and leadership in many fields, includ-

specialized skills to Latin America; so did the French in tanning, the English in textiles. Foreign technicians often remain and become a nucleus of skill diffusion (cf. Wythe, *op. cit.*, p. 53).

[100] *The Economic Development of Iraq*, as cited, p. 278; *The Basis of a Development Program for Colombia*, as cited, p. 92; and Mosk, *op. cit.*, p. 265.

[101] *Report on Cuba*, as cited, p. 156; *The Economic Development of Ceylon*, as cited, p. 511; Issawi, *op. cit.*, p. 8; Lokanathan, *op. cit.*, p. 315; and "Indianization for Foreign Firms," *The Economist*, May 16, 1953, p. 450.

ing marketing. Government can contribute expert appraisal and guidance, in some respects, but not the essential qualities of entrepreneurial skill.[102]

COSTS AND PRODUCTIVITY

The present section considers the needs for and supply of various resources once more, but from the point of view of cost. After reviewing his capital and labor requirements, a prospective entrepreneur can be expected to enter into a series of rational calculations designed to frame his profit expectations: the determination of costs of production and the formulation of a price policy. All the previous difficulties are compounded in this crucial process of estimation, for which the entrepreneur's own skill is often less than adequate.

Regarding costs, little more need be said about the lack of facilities and "external economies" discussed earlier from the standpoint of capital requirements: transportation, communications, power, repair facilities, supplies of raw materials and fuels, training for skills on all levels. If the industrialist has to provide all or any of these facilities, his cost structure will be doubly burdened: with the cost of additional capital and with the cost of its operation. This added cost is frequently permanent, but if these facilities are eventually provided by the community the industrialist's investment will be redundant and partly wasted, an expense which later entrants into the industry may not have to face. Clearly, such an addition to real costs affects the outlook for successful competition, in addition to increasing the over-all risk.

Although difficulties in obtaining finance for new ventures result in underestimation of needs and in subsequent dependence on unreliable and high-cost short-term accommodation, lack of foresight adds to the difficulty of cost estimation.

Labor cost is determined not only by wage rates but also by labor productivity, which is usually lower in underdeveloped countries than in the United States, even if the most modern machines are imported. Many reasons contribute to this effect: lack of skills and supervision, poor layout and material flow as well as other operational deficiencies, absence of ancillary services, etc. Sometimes such an elementary factor as poor nutrition is at fault. Low wages compensate in part for low productivity but fail in turn to provide in-

[102] *The Basis of a Development Program for Colombia*, as cited, p. 92; *The Economy of Turkey*, as cited, p. 160; *A Report on the Process of Inflation in Chile*, as cited, p. 62; El-Gritly, *op. cit.*, p. 498; and Samant and Mulky, *op. cit.*, p. 179.

centives for increased efficiency. The seemingly low cost of labor induces slack supervision and toleration of waste, resulting in still lower productivity.

The make-work tendencies of labor which arise from fear of unemployment are increased by insistence on low work norms and resistance to mechanization. Examples abound in the literature; only a few will be mentioned. In Syria strikers in the Aleppo cotton mills demanded that no worker should handle more than one loom, instead of three as in the past. In Mexico the unions resisted a norm in excess of four looms per worker, even where more efficient machinery would have permitted it; moreover, the modernization of the over-age equipment characteristic of the textile industry was delayed for years, in spite of earnest efforts by employers, unions, and the government to find a solution. Many specific instances of successful opposition to modernization in Cuba could be quoted.[103]

Such tendencies keep productivity low and give prospective employers a feeling of uncertainty regarding the difficulties they may encounter. The anticipation of productivity ratios in new industries meets many other obstacles. Some are related to the difficulties of transferring technology and selecting the most suitable technical installation and method. If we combine all this with the uncertainty afflicting the entire area of productivity and of labor relations, it becomes evident that a proper calculation of labor costs presents great difficulties.

PRICES AND COMPETITION

The analysis thus far permits an understanding of the tendency toward high prices in underdeveloped countries, usually noted with an undertone of disapproval. Costs are high because capital is scarce; many essential services must be obtained at private rather than public expense; labor productivity is low; direct costs are difficult to estimate, so prudence favors high prices in order to escape the penalties of underestimation. It is equally difficult to appraise the size of the market and hence a cautiously low estimate of sales increases the unit share of overhead costs; a tendency to keep unit profit high works in the same direction, but this last factor will be discussed in the next chapter.

[103] *The Basis of a Development Program for Colombia*, as cited, p. 92; *Report on Cuba*, as cited, pp. 60, 143 ff., 170 ff., and 185 ff.; Mosk, *op. cit.*, p. 126; and *Final Report of the U.N. Economic Survey Mission for the Middle East*, Conciliation Commission for Palestine, United Nations, December 29, 1949, Part I, p. 42.

All these considerations lead to a desire for high prices. But how can they be achieved in the face of competition? The answer is found in protective measures to keep out foreign competition and in quasi-monopolistic situations domestically.

In discussing protection, we are concerned not with the forms it takes in many countries but only with some of its effects. Sometimes a protective tariff is put on in order to attract industry, but, as in Latin America, although no industry may be started the tariff often remains, thus abortively increasing the level of domestic cost. In other cases high domestic costs or inflation encourage increased protection, but industry's response is apt to be not greater efficiency but higher prices and profits; these, in turn, make foreign competition possible again, which leads to new demands for protection. Such instances of overprotection should not detract from the merits of reasonable protection in raising the marginal productivity of capital as an incentive to investment. Duties on imports, however, should be made selective, and reducing them from year to year would be an incentive to improved efficiency; in Uruguay in 1931 and in El Salvador recently an increase of duty was canceled because the public did not benefit enough by the added protection![104]

Restrictions of domestic competition by outright cartel arrangements or by government price-fixing occur in any country, underdeveloped or advanced. Informal situations of monopoly or quasi-monopoly, however, arise more frequently in the former, and they are of greater interest for us. If a market is deemed so small that competition is effectively discouraged by fear of overcrowding, the established manufacturer has the market for himself and can set the price as high as he dares; a very small number of competitors does not have to resort to collusion to perceive the same advantage. In addition to the deliberate creation of a monopoly by governments, in order to attract new industry which is made immune against competition not only *de facto* but *de jure*, a profitable price may be actually guaranteed under a system of price control, as in the case of the cement industry in Jamaica.[105]

Scarcity of entrepreneurship and of capital limits the number of individuals in large industry to a small group; this may explain in part why large industry tends to be less competitive than small

[104] Wythe, *op. cit.*, p. 75; *The Economic Development of Nicaragua*, as cited, p. 100; *The Economic Development of Iraq*, as cited, p. 40; *Report on Cuba*, as cited, pp. 184 ff.; and El-Gritly, *op. cit.*, p. 569.

[105] *Report on Cuba*, as cited, p. 187, and *The Economic Development of Jamaica*, as cited, p. 236.

industry in countries like Egypt. Also, it takes a larger number of firms to saturate the market if the unit is small. In fact, it may be surmised that limitations inherent in demand would be less detrimental to growth where small-scale technology prevails because the addition of another small unit would not threaten the market with oversaturation.

Summing up, it can be said that estimation of future prices meets with less difficulty than that of future cost in underdeveloped countries. Protection and rigidities limit price competition in new industries. Thus the risk of competition is reduced, at the expense of flexibility and of efficiency. On the other hand, the ever-present awareness of economic instability, inherent in fluctuations of seasonal and cyclical character, tends to decrease the certainty which protection and monopoly give to price expectations. Elastic expectations resulting from inflation may bolster investment in some activities, but not, as we have seen, necessarily in the productive types; moreover, progressive distortions of the price structure are an inevitable concomitant of inflationary pressures.

PROFIT AND RISK

There is no basis of experience and information for complex considerations of profit maximization in underdeveloped countries; as a rule, profit will take the form of a fixed markup added to cost. It is often said that this markup is too high, in line with the customary high profit–low volume reasoning. As a result of the preceding analysis, the reasons can be summarized with some degree of precision.

It could be said, with some justification, that a policy of large volume at low unit profit is stressed in this country more than anywhere else because the United States market is so large; moreover, high incomes, equitably distributed, give a wide scope to consumer choice under competitive pricing conditions. It is quite true that some such improvement could often be achieved also in underdeveloped countries, but the limitations to such a policy should be equally understood. If incomes are low and the market small, large volume may not be attainable, no matter how low the price. To reduce profits drastically below customary levels would require optimistic expectations of a specific character: expectations that the market, or the obtainable share thereof, can be permanently expanded. Because the economies of underdeveloped countries tend to instability, seasonal or cyclical, including frequent small fluctua-

tions related to world conditions, it seems natural not to gamble on permanently high demand but to take what the market will offer, as long as possible, and build up reserves against the time when the tide will turn with familiar rapidity. A bold price policy presupposes confidence in the future and ability to withstand the consequences of failure; neither of those preconditions is very common in underdeveloped countries. Hence, one reason for high profits is the inclusion of a risk premium against the effects of instability.

Another cause is found in the prevalence of inflationary trends. Profits seem high in money terms but may not be high in real terms. In fact, businessmen in countries where prices have risen steadily for years complain that profits are not high enough since wages anticipate future price rises. Moreover, there are indications that profit opportunities, initially stimulated by inflation, decline after some time while profits in less-favored activities have been squeezed by inflation from the outset. In any event, profits include a risk premium against continued shrinkage of working capital in real terms, a risk made virtually certain in the light of past experience.[106]

The pertinent question is, however, whether these profits are too high. If we divorce this problem from preconceived notions about "fair" profits, we ought to inquire whether lower profits could still be expected to attract investment to industry. The reply is found in two directions which we have already explored: the attraction of other investment, and the specific uncertainty and risks connected with industrial enterprise in underdeveloped countries.

The first of these points bears repeating without elaboration. In underdeveloped countries many opportunities exist for employing capital very profitably in commercial and financial ventures, or in real estate. A wide base of experience makes fairly certain high profit expectations in these traditional pursuits. Thus they appeal to the prospective investor not only as good investments but also as relatively safe ones, no matter how speculative they are.

In comparison with his position regarding this favorable balance sheet of profits and risks, the prospective investor has difficulty in appraising the prospective profits of industrial enterprise. As we saw, he finds it difficult, if not almost impossible, to determine his cost accurately in advance. The risk of miscalculation could be compensated only by a reserve added to cost or by a risk premium added to profit. The same calculation would apply to prices and

[106] Bernstein and Patel, *op. cit.*, pp. 377 ff., and *Report of the U.N. Economic Mission to Chile*, as cited, p. 2.

volume of sales, both difficult to forecast unless prices and market are guaranteed by monopolistic arrangements. To these risk premiums should be added the most weighty of all: that against loss of capital in new ventures.

The question then arises whether the expected profit will be deemed large enough to cover all these risk premiums and leave sufficient inducement to invest in industry rather than in other activities. Some incentives can be offered by governments. Exemption from duties on equipment and materials reduces capital outlay and cost. Exemption from taxes also reduces cost if such taxes are considered business expenses; otherwise a better ratio of profits before and after taxes results. Accelerated write-off for purpose of taxation operates in the same manner and, incidentally, reduces the period within which the investment can be recouped.[107] A virtual guarantee of profit, of course, eliminates several uncertainties at the same time. Thus in the last quarter of the nineteenth century the sugar industry in Brazil was guaranteed a return of 7 per cent on invested capital. Recently, prices were set for the copra industry in Jamaica so that profits would not be less than 5 per cent of sales.[108]

Doubtless, such measures tend to increase the margin of profit and also reduce some specific uncertainties. However, they are not sufficient to induce optimistic profit expectations large enough to balance a variety of risks. Risk premiums cannot be accurately calculated where a wide base of experience does not exist; degrees of confidence in approximate calculations must ultimately depend on faith that, in the long run, "the risk will pay." Economic development itself tends to bear out such expectations by a systematic upward shift of the schedule of marginal efficiency of capital in industry. Unfortunately, such a trend cannot be perceived in advance in the form of tangible signals to guide a prospective investor. Thus a rational weighing of risks against profit expectations, discounted by cautionary factors related to uncertainty, tends to turn investment decisions against industrial enterprise.

[107] It is often said that entrepreneurs in underdeveloped countries want to get their investment back within a few years, and this tendency is attributed to a get-rich-quick attitude. This may be the motivation in many instances, but another explanation presents itself: if the economic horizon is foreshortened, as a result of cumulative uncertainty, faster risk liquidation by amortization of capital may well be the condition which makes an investment at all acceptable.

[108] Wythe, *op. cit.*, p. 189; *The Economic Development of Jamaica,* as cited, p. 236; John H. Adler, E. R. Schlesinger, and E. C. Olson, *Public Finance and Economic Development in Guatemala,* Stanford University Press, 1952, pp. 109 ff.