restrictions. There are also broad tendencies in plant design, mechanical equipment and power use which cannot be overlooked. There are often labor problems of special importance. Processes of manufacture may be controlled through patents and trade secrets or may be undergoing significant changes. From the records of physical and value production, we can study seasonal and cyclical fluctuations which often tell the financial hazard more clearly than balance sheets and income accounts. There are also important questions of economic location, of trends toward integration, of marketing methods and possibilities. In some industries, it is feasible to make comparative financial studies for the purpose of establishing typical or standard financial relationships. Many industries through their associations are sponsoring improved accounting and managerial methods, the growing importance of which the investment banker can not afford to ignore. The individualistic company which contributes nothing to the general uplift of the industry and disregards the opportunities for co-operative advancement is seldom the best financial risk. Too often it is left behind in the procession.

The next step is to determine the position of the particular company in the industrial group. We must know its life history—its inception and development. We appraise its comparative position with respect to growth in volume and value of sales, plant capacity, ratio of production to capacity, control of raw materials, patents and processes, quality of product, public and trade opinion, general efficiency of organization and profitability of operation. These and other factors throw light on the relative position of the company in the industry, but more exhaustive analysis is, of course, essential to determine the reasons for the company's present and probable future competitive position. Within our allotted time we can do no more than to sketch the barest outlines of this further investigation.

It is necessary to make an economic study of the individual company. We must consider questions of location, physical equipment, raw materials, labor, finished products and their marketing. Our problem is to analyze the hazard present in various aspects of these factors. Obviously, favorable location with respect to raw materials, labor, power, and markets for finished products is always important. Proper physical equipment is likewise necessary. We examine the character of construction, age and general condition of factory buildings. We devote similar attention to mechanical equipment. We study plant lay-out to determine its suitability for efficient manufacturing. We want to know all about the company's methods of buying raw materials. If it is a company exploiting natural resources, we must consider the adequacy of reserves. Questions of labor supply, turnover, wage systems, welfare work, unionization and related matters must be carefully weighed. We must know a great deal about the finished products of the company, such as efforts toward standardization and simplification, fluctuations of production, character of demand, marketing methods and other features. In short, we must unearth every important detail which will aid in forming a sound opinion of the economic merit of the enterprise.

We may then pass to the problems of financial analysis. We must examine the income accounts over a period of several years, through prosperity and through depression. We are interested in the growth of sales, their seasonal and cyclical fluctuations. We must analyze the cost of sales, particularly the changes in the proportions of labor, raw materials and overhead. The movement of both gross profit and net income is similarly important. We cannot neglect the question of disposition of net income, the proportions paid in dividends and reinvested in the property. Comparative study of balance sheets is also necessary. Current assets and current liabilities, plant accounts and depreciation reserves, investment accounts, intangible items, funded debt, and capital accounts, surplus and other accounts must be subjected to searching examination.

We have said that management is the most important factor in investment risk. Throughout all of this elaborate investigation, we have been gathering material upon which to base our opinion of the character and ability of management. If there is lack of judgment in plant location and lay-out, that fact cannot escape the skilled investigator. If there is inadequate and careless maintenance, it is equally evident. If there are slip-shod purchasing methods, they become apparent. If there are archaic labor policies, it does not take long to spot them. There is probably not a single important phase of production, marketing, accounting

and finance which is not appraised in the light of accepted standards of good management. It cannot be otherwise. The reputable investment banker must protect the interest of his customers. Management is his greatest risk. He is not oblivious to the scientific spirit in industry. He has had long experience; he knows that the unscientific and inefficient management is foredoomed to failure in a scientific age. He is vitally interested in every movement which aims to mitigate the hazard of investment.

For these reasons the management of the company under investigation must be studied with great care. We must delve into the company's methods of administration and the character of the organization. In the better companies we expect to find logical division of operations, rational delegation of authority and responsibility, and proper co-ordination of executive effort. The field examiner cannot depend upon the formal picture presented by the organization chart. By skillful observation and cross-questioning of executives in charge of both major and minor operations, he must check performance with theory. He often finds faulty division of operations, diffusion of responsibility and serious lack of co-ordination. It is important to obtain a great deal of information about the company executives. Education, business experience, loyalty and personality must be ascertained. There is much truth in the statement that an institution is the lengthened shadow of a man. There is no particular harm in an organization of this type if the ideals, methods and principles of the dominating personality at the head of the business are sound. There is always danger, however, that the dominating chief executive may build an organization in which initiative and creative thinking are not encouraged. The investor's capital is always safest in the company where managerial policy permits a continuing flow of ideas from many minds and provides for an impartial appraisal of their value. Good management often makes an inadequately equipped company in a business of more than usual risks worthy of investment financing.

No matter how exhaustive the banker's field investigation may be, there is always danger of error. The sound analysis of the risk in a given enterprise is a problem of infinite complexity. It is seldom possible to segregate the variables of managerial skill and economic conditions with any degree of precision. The best we can do, is to make what seems to be an intelligent guess. The competency of management cannot be judged solely upon the basis of net profit earned. Business profits often arise out of transitory economic causes. Favorable economic conditions or economic accidents may make it possible for a mediocre management to show good profits over several years. The real test comes only in periods of adversity. Many an erstwhile captain of industry is the product of favorable economic circumstances and loses his commission in the first serious business depression, or other change in the character of the problems which his company must face. It may be of interest to comment briefly on transitory causes of business profit.

Whatever one's convictions on the merit of a high protective tariff may be, there can be little doubt that it often fosters a spirit of managerial complacency, or self-satisfaction, and fails to stimulate initiative and creative thought. In this country we have several woolen and worsted mills which can and do make products the equal of those from foreign looms. We have dozens of other mills which manufacture inferior cloth at high cost with obsolete machinery. Many of the latter have survived and made profits in several years, solely because of the shelter afforded by the tariff wall. In many other industries, we protect the inefficient and incompetent and enable them to make profits behind legal barriers. In protected industries, the investment banker must always contemplate the effect of tariff changes.

A shift in the economic location of an industry may materially affect the profit showing of companies which have previously had long records of financial success. A case in point is the cotton manufacturing industry of New England. A large part of the industry is now located in the Southern States, favored by cheap labor and power and proximity to raw materials. Many efficient mills in New England are still able to make money, but a considerable number are unable to meet effectively the Southern competition. In some instances, particularly on cheaper cloth constructions, the Southern mills possess decided economic advantages, but nearly every textile trade journal comments at length on the inefficient methods and obsolete machinery of unsuccessful mills in New