

REGIONAL DEVELOPMENT IN DEVELOPING NATIONS*

WILLIAM E. LAIRD
JAMES R. RINEHART

The less developed regions of both developing and advanced nations face particular problems in bringing themselves into the mainstream of economic progress. The political realities are such that certain policies (e. g., infant industry tariffs) to spur growth open to developing nations are not open to the political subdivisions of the advanced nations or the developing nations.¹ However, it may be possible for the less developed regions of developing countries to profit by adapting the promotional techniques employed by the less developed regions in advanced nations. This is especially intriguing where the gains of one region do not necessarily imply losses to another national region, and thus regional gains constitute national gains. The purpose of this paper is to examine the industrial subsidization policies used by states and localities in the United States with a view to their adaptability to developing economies.

Local interest in and support of industrialization has a long history and continues to be important in the development efforts made in the American South. This is well documented in the growth of the cotton textile industry in the South after the Civil War. The region, which was a raw material producer and exporter at the time, produced an abundance of cotton and was well suited for the textile industry. But events leading to the establishment of many textile firms indicate clearly that the motives were far more complex than direct financial returns to investors. Newspapers, churches, and other civic and private groups worked to establish the mills. One of the obvious motives for such activity was to provide employment to the destitute that abounded in war-devastated agricultural regions. Also of importance was the conviction on the part of many Southerners that industrialization was vital for the economic future of the region, which at the time was almost entirely agricultural.

Unfortunately capital was short and quite slow to flow into the South from other regions primarily because of political complications, but as Pro-

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¹ For an outstanding discussion along these lines see, Eldon D. Smith, "Restrictions on Policy Alternatives Relating to Underdeveloped Regions of Developed Countries," *Journal of Farm Economics*, Vol. 48 (December, 1966), pp. 1227-1231.

fessor Mitchell has appropriately commented: "In the midst of poverty, there was a will that found a way to capital investment in cotton mills. Few had had experience of the engineering problems involved, but factories sprang up and were equipped with the best machinery."² Some of these firms are still operating profitably today. The region is so well suited to textiles that those unfamiliar with the area's history find it difficult to believe that the growth of this enterprise was not entirely spontaneous. Nonetheless, history indicates that without the active promotion by local interests the Southern textile industry would have developed much more slowly.

The attitude toward development evident in the textile movement has continued in the South though, of course, the circumstances have changed significantly. Today the impetus for development programs comes from local governments, local Chambers of Commerce or local private development committees.³ Their efforts toward industrialization generally elicit positive responses from Southern communities. For example, in recent years one depressed small town called for donations to raise funds to locate an industrial firm in the community. The citizens responded dramatically and in a single day *voluntary* contributions greatly exceeded the sum required.⁴ It is apparent

² Broadus Mitchell, *The Industrial Revolution in the South*, Baltimore, Maryland, The Johns Hopkins Press, 1930, p. 239. For further discussion of the development of the industry see Broadus Mitchell, *The Rise of Cotton Mills in the South*, Johns Hopkins University Studies in Historical and Political Science, Ser. 49, No. 2, Baltimore, Johns Hopkins Press, 1921, Matthew B. Hammond, *The Cotton Industry*, New York, Macmillan, 1897, Augustavus Galloway Williamson, Jr., "Cotton Manufacturing in South Carolina, 1865-92," Ph. D. Dissertation, The Johns Hopkins University, Baltimore, Maryland, 1954, and Lawrence Benjamin Graves, "The Beginning of the Cotton Textile Industry in Newberry County," M. A. Thesis, University of South Carolina, Columbia, South Carolina, 1947.

³ It should be noted that in some Southern communities local churches still take an active part in facilitating industrialization. For example, in one recent case a local church purchased a building newly constructed to a firm's specifications and then rented it to the firm. This was only one part of the total package offered the new firm by the locality. For a detailed treatment of community development efforts in the United States see Donald R. Gilmore, *Developing the "Little" Economies*, Committee for Economic Development; Supplementary Paper No. 10, April, 1960.

⁴ For a complete discussion of this case see James R. Rinehart and William E. Laird, "A Refinement of Local Industrial Subsidy Techniques," *Mississippi Valley Journal of Business and Economics*, Vol. 3 (Spring, 1968), pp. 90-99. For a discussion of other cases see Ernest J. Hopkins, *The Louisville Industrial Foundation, A Study in Community Capitalization of Local Industries*, Atlanta, Georgia, Federal Reserve Bank of Atlanta, 1945, Ernest J. Hopkins, *Mississippi's BAWI Plan, An Experiment in Industrial Subsidization*, Atlanta, Georgia, Federal Reserve Bank of Atlanta, 1944, John R. Fernstrom, *A Community Attack on Chronic Unemployment, Hazelton, Pennsylvania: A Case Study*, Washington, D. C., U. S. Government Printing Office, 1960 and Ronald B. Gold, "Subsidies to Industry in Pennsylvania," *National Tax Journal*, Vol. 19 (September, 1966), pp. 286-297, W. D. Knight, *Subsidization of Industry in Forty Selected Cities in Wisconsin, 1930-47*, Bulletin of the University of Wisconsin, *Wisconsin Commerce Studies*, Vol. 1, No. 2, 1947. The above references

that the indirect and non-monetary returns must have weighed heavily in the minds of those making the donations. In other cases, the local campaigns have been directed toward encouraging the purchase of the new firm's securities, thus providing needed liquidity and an immediate source of credit for the enterprise. In these instances, of course, the direct profit incentive was also at work. In many cases the localities involved have offered subsidies to the firms in question. These subsidies have taken diverse forms including direct money payments, investment capital at below market interest rates, specific tax concessions, gifts or low rentals of buildings, machinery and equipment, free or low cost plant sites and improvements, employee training programs, and special utility rates.⁵ Financing has come largely from local sources (both private and public), and where tax funds have been involved voters have usually given overwhelming support. For instance, the Mississippi "Balance Agriculture with Industry" program requires a two-thirds majority vote on each subsidy project before it can be consummated. And many have been completed.⁶

These local efforts should interest developing nations since such efforts can, in the environment of less developed regions, make a *positive* contribution to economic growth.⁷ Among the more important factors that bring about the positive contribution are found: (1) The incentives to save and invest are changed. Local efforts modify the parameters that determine these crucial aggregates. (2) Local efforts may offset central government policies that handicap regional development. (3) The existence of immobilities within the

demonstrate that efforts for local development have not been confined to the South. About two-thirds of the states have some system for promoting industrial development. See also John E. Moes, *Local Subsidies for Industry*, Chapel Hill, North Carolina, University of North Carolina Press, 1961.

- ⁵ For further information along these lines see Victor Roterus, "Community Industrial Development—A Nationwide Survey," *Development Corporations and Authorities*, U. S. Congress: Senate, Committee on Banking and Currency, 86th Cong., 1st Sess., December, 1959, pp. 218-229. For a good study of specific financial arrangements pertaining to the location of industrial firms in the State of Florida see Felix Muehlner and James G. Richardson, *Financing New Manufacturing Plants in Florida*, Bulletin Series 84, Vol. 10, No. 10, Florida Engineering and Industrial Experiment Station, University of Florida, Gainesville, October, 1956. Also see Gilmore, *loc. cit.*, and Moes, *op. cit.*, especially Chapter V.
- ⁶ See Hopkins, *Mississippi's BAWI Plan, An Experiment in Industrial Subsidization*, pp. 8 and 28. For voting outcomes of specific cases see pp. 38-50.
- ⁷ The positive contribution is emphasized here because local efforts are not to be compared to a zero-sum game in which total industrialization remains unchanged and only the geographical pattern of its location is modified by subsidies. The factors cited above create a strong presumption of positive contributions. See also the articles cited in footnotes 8-14. Although invalid, the zero-sum game idea seems to underlie the objections that many people raise to subsidies. For example, see William J. Schultz and C. Lowell Harriss, *American Public Finance*, eighth edition, Englewood Cliffs, New Jersey, Prentice Hall, 1965, pp. 65, 483.

labor force may create long-term unemployment and underemployment in less developed regions. The economic loss involved in this may be substantial. Local efforts may promote the full utilization of these and other resources. (4) Local efforts may make possible those initial operating firms that create the external economies that ease the way for subsequent firms. The creation of external economies within the less developed region will facilitate further growth. This would be growth that otherwise might not have occurred, or might have occurred only in the distant future. These points merit further consideration.

(1) There are good reasons to believe that local efforts to promote industry tend to increase net savings and investment in the national as well as regional economy. The voluntary contributions cited above are directly relevant to this point. However, more is involved than just voluntary contributions. Savings are very likely to increase where the promotional efforts are in terms of some local agency or government sponsoring the sale of securities to citizens and local organizations. The reason is simple. This prompts the purchase of new securities by many individuals who would ordinarily not engage in such transactions. Local "patriotism" or "boosterism" works to encourage the purchase of such securities, since the success of the firm in question will add measurably to the local economy. The motives involved in the purchase of the stocks would be a mixture of monetary and non-monetary considerations.⁸ The purchaser hopes for an eventual return on his investment. If this is a local businessman, he may share indirectly in the added payroll of the new enterprise as his own business expands with the growth of local income.

The non-monetary considerations may be equally important in assuring support of the security issues (or support of measures to raise taxes for subsidy funds). The stimulus provided to the local economy may contribute to the expansion in shopping alternatives, parks, recreation facilities, and schools. Furthermore, the new enterprise will provide employment alternatives and may employ relatives and friends of those investing in the concern, and this may be a powerful non-monetary consideration.

It is apparent that many citizens would have a strong direct or indirect interest in the establishment and success of the enterprise in question. The positive impact of the organization on the local economy will tend to increase the attractiveness of the investment to the local population. It will have a broader and more direct appeal than would investment in the securities of established firms at other locations. The latter type of investment has the direct monetary attraction, but not the indirect and non-monetary attractions

⁸ Some individuals and private companies invest in development credit corporations primarily for the public interest. Development corporations work to encourage and facilitate industry in a variety of ways. Often the corporations pay no dividends. Benefits accrue only indirectly as the economy expands. For a discussion of this see "Development Credit Corporations, a Stimulant for Economic Growth," *New England Business Review* (June, 1958), pp. 1-4. This is published by the Federal Reserve Bank of Boston.

which may be important in providing an extra margin of savings for industrial expansion in the less developed areas.⁹

The emphasis here is on the mobilization of domestic capital and the stimulation of savings. Subsidy funds could also be used to promote the entry of foreign capital, thus giving the funds great leverage in promoting both regional and national development. Ultimately, this might prove to be the more important aspect of the approach.

(2) The less developed regions are likely to suffer from certain policies of the central government. These policies may take the form of rigidities or impediments to normal market processes, thus skewing the spatial pattern of economic activity to the disadvantage of less developed regions. Because of this, local subsidies may create a spatial pattern of activity more compatible with existing resource endowments. The outcome is the enhancement of social welfare. An example of this is found in the minimum wage legislation in the United States. The impact of the legislation has not been uniform and the less developed areas have suffered extra margins of unemployment as wages have been pushed above competitive levels in those areas.¹⁰ By reducing wage differentials such legislation has also reduced the interregional mobility of industry and economic efficiency. Local subsidies offer one means of nullifying the adverse effects of this type of interference.

(3) Another characteristic of the less developed areas of the South is that of labor immobility. This is not to imply that the entire labor force is immobile, but it is true that significant portions exhibit a low mobility. This is particularly true of those with few skills living in rural areas. It has been demonstrated that where there is significant labor immobility industrial subsidies are fully consistent with economic efficiency.¹¹ Resources are employed that might otherwise be unemployed or underemployed, thus producing both regional and national benefits.

⁹ Of course, many factors influence the level of savings in addition to local development efforts. A good survey of these diverse forces may be found in Gardner Ackley, *Macroeconomic Theory*, New York, Macmillan, 1961, pp. 208-307.

¹⁰ See James M. Buchanan and John E. Moes, "A Regional Countermeasure to National Wage Standardization," *American Economic Review*, Vol. 50 (June, 1960), pp. 434-438. For a discussion of the regional impact of minimum wage see Marshall R. Colberg, "Minimum Wage Effects on Florida's Economic Development," *The Journal of Law and Economics*, Vol. 3 (October, 1960), pp. 106-117. Also of interest is George Macesich and Charles T. Stewart, Jr., "Recent Department of Labor Studies of Minimum Wage Effects," *Southern Economic Journal*, Vol. 26 (April, 1960), pp. 281-290 and John M. Peterson, "Employment Effects of Minimum Wage, 1938-50," *Journal of Political Economy*, Vol. 65 (October, 1957), pp. 412-443.

¹¹ Ralph Gray, "Industrial Development Subsidies and Efficiency in Resource Allocation," *National Tax Journal*, Vol. 17 (June, 1964), pp. 164-172. See also by the same author, "An Economic View of Municipal Subsidies to Industry," *Municipal Finance*, Vol. 74 (May, 1964). For other points regarding economic efficiency see Elliott R. Morss, "The Potentials of Competitive Subsidization," *Land Economics*, Vol. 57 (May, 1966), pp. 161-169.

(4) Less developed areas within a nation tend to be handicapped by the relative scarcity of external economies available to new firms. The more advanced regions offer concrete advantages to new or expanding industries that the less developed do not possess—because they *are* less developed. These advantages take many forms. The higher income provides a greater source of funds for both private and public investment. The advanced areas have a greater opportunity to build both human and material capital, and their accumulated capital (including educational and health facilities) will prove appealing to new industries.¹² Labor is likely to be experienced in a variety of occupations and therefore should require less training by new firms. Thus, labor is likely to be more adaptable and this is attractive to new firms. These advantages come from development and serve to facilitate further development. But the process must get started and local industrial subsidies may serve as the catalyst. They get the process of growth started, and once started it tends to create external economies.¹³

The enthusiasm for local development and the support which these programs have received in the less developed American South are understandable and, as recent theoretical and empirical work has demonstrated, economically rational. The point of interest here is that, within limits, the less developed regions of some developing countries suffer many of the same problems as do the low income regions of advanced countries. Unemployment is a problem, but underemployment is a more pervasive difficulty. Labor immobility is a problem with at least a portion of the work force. These regions lack the external economies possessed by the advanced region. They lack many of the public facilities, and their educational and health facilities, generally suffer by comparison with the advanced region. The problem for the area is that the operation of the economic system tends to perpetuate their relative positions, unless some factor (such as local subsidies) intervenes to break the chain of events. It is indeed easier for the rich to become richer than for the poor to become prosperous. This appears to be particularly relevant on a regional level.¹⁴ However, the important point is that local efforts to improve the situation may well improve not only local conditions but enhance national growth as well. Economic efficiency may be improved significantly.¹⁵

¹² For further discussion of this point see William E. Laird and James R. Rinehart, "Neglected Aspects of Industrial Subsidy," *Land Economics*, Vol. 43 (February, 1967), pp. 25-31. See also by the same authors "Local Industrial Subsidy and Regional Growth," *Bentley Business and Economic Review*, Vol. 2 (June, 1966), pp. 122-129.

¹³ *Ibid.*, "Neglected Aspects," pp. 27-29, and William J. Baumol, *Economic Theory and Operations Analysis*, Englewood Cliffs, New Jersey, Prentice Hall, 1961, p. 261.

¹⁴ See Rufus B. Hughes, Jr., "Interregional Income Differences: Self-Perpetuation," *Southern Economic Journal*, Vol. 28 (July, 1961), pp. 41-45, E. J. R. Booth, "Interregional Income Differences," *Southern Economic Journal*, Vol. 31 (July, 1964), pp. 44-51, and Edgar M. Hoover, *The Location of Economic Activity*, New York, McGraw-Hill, 1948, pp. 3-4. See also Gunnar Myrdal, *Economic Theory and Underdeveloped Regions*, London, Gerald Duckworth and Company, Ltd., 1957.

¹⁵ The above comments should delineate the relevant context for discussing efficiency.

The above discussion suggests the potential utility of local or regional development efforts in developing countries. However, still other reasons exist for believing that such efforts will contribute to efficiency and growth. First, development efforts are generally concentrated at the national level, whether comprehensive plans or merely modest efforts to enlarge the economy are involved. These national undertakings naturally involve questions of political influence as well as economic rationality. In the political sphere it is quite possible for the economic future of a locality, or region, to be neglected to its detriment and the detriment of general development. And it may be politically impossible to have the overall national plans modified. The point is that local or regional efforts may play a role in correcting this broader and more serious problem just as they might be used to offset the more limited effects of, say, minimum wage legislation.¹⁶ Where areas have not been neglected, their endeavors would *supplement* national efforts in the ways already suggested. In either case, local or regional subsidies provide a means of bringing lagging areas into the mainstream of development.

The second reason is related to the first, but is probably more important. It is significant that local or regional development efforts may well be motivated more by direct economic considerations than national efforts often are. It is widely acknowledged that national development efforts often tend to be more grandiose than is economically justified. One of the immediate difficulties with concentrating development efforts at a national level is that non-economic matters, such as "national prestige," are likely to be more involved in decisions than is desirable from the viewpoint of economic growth. Political considerations are more likely to be important in decisions at the national level because questions of national prestige *are* weighed more heavily at that level. The national efforts will tend toward the grandiose because of the greater availability of funds at that level. Local or regional decisions may be swayed by political considerations, but to a lesser extent because such matters are not the direct concern of those governmental units. Local and regional agencies command fewer resources and thus, of necessity, will tend to weigh economic considerations more heavily in their decisions.

The weight given to economic considerations in investment decisions may be of great significance to developing nations. The economic emphasis means that local efforts are unlikely to encourage an industrial pattern that is inconsistent with existing factor proportions. With local efforts, there would be a tendency toward investments most compatible with the region's resource

While the competitive model provides norms, the optimistic conclusions of the model rest upon conditions that often are not fully met in the less developed areas of both advanced and developing countries. Instead, there are troublesome labor and capital immobilities. Externalities are a problem. And central government policies may introduce non-competitive elements. Under these conditions, subsidies may promote greater efficiency and growth than the unaided market. The reasoning is similar to that of the infant industry tariff argument.

¹⁶ Buchanan and Moes, *op. cit.*

endowments. For lagging regions in developing nations this will probably mean investment in labor-intensive industries which utilize rather simple technology. This variety of investment would fit nicely with the view of development which emphasizes continuity and relative scarcities in economic affairs and a persuasive case can be made that that is an optimum approach to follow while resource endowments are being modified (through education, technological advances, new investments, public works, etc.). Such investments provide the current income with which to modify future endowments. They would also provide external economies that would facilitate further change.

There is reason to believe that greater emphasis on small-scale industry would be highly desirable,¹⁷ and in bringing this about rural localities perhaps would be better equipped than national governments. The interest in small-scale enterprise stems from several factors. First, capital markets in the less developed nations are not very sophisticated and are not, therefore, usually suited to raising large sums of capital.¹⁸ As Aubrey has pointed out, "... it may be easier to raise private capital for a number of small enterprises over a period of time than for a large plant."¹⁹ Second, large cities do not possess all the wealth. There are considerable amounts of wealth in rural areas that have not been tapped.²⁰ Local development programs are much more likely to tap these sources of capital. And third, small-scale industry (rather than large-scale enterprise) is apt to make more effective use of such capital because small industry does not require the same dependence on capital-consumption installations such as power projects, workers' housing, administrative offices, etc.²¹

The above approach contrasts with the controversial "advanced hardware" approach, which asserts that the most efficient way to grow is to invest in the newest and most advanced (and expensive) hardware rather than currently less expensive techniques that more closely accord with existing resources.²² The approach is based, in part, on a "demonstration effect" on the production side of the market and to that extent is psychological in origin.

¹⁷ Bauer and Yamey, *The Economics of Under-developed Countries*, Chicago, University of Chicago Press, 1957, pp. 102-106; 204 and 252-254.

¹⁸ Arthur I. Bloomfield, "Monetary Policy in Underdeveloped Countries," in *Readings in Economic Development*, ed. by Theodore Morgan, George W. Betz and N. K. Choudhry, Belmont, California, Wadsworth Publishing Company, Inc., 1963, p. 367.

¹⁹ Henry G. Aubrey, "Small Industry in Economic Development," *Social Research*, Vol. 18, No. 3 (September, 1951), pp. 270-312. Also reprinted in Lyle W. Shannon, *Underdeveloped Areas: A Book of Readings and Research*, New York, Harper and Row, 1957, pp. 220-221.

²⁰ *Ibid.*

²¹ *Ibid.*

²² For a discussion embodying this "advanced hardware" approach, see Staffan B. Linder, *Trade and Trade Policy for Development*, New York, Praeger, 1967. A somewhat different approach to this development model is found in Alec Nove, "The Explosive Model," *The Journal of Development Studies*, Vol. 3 (October, 1966), pp. 2-13.

While no effort will be made here to settle the controversies surrounding the advanced hardware approach to development, two points are worthy of notice. (1) The advanced hardware approach is especially likely to neglect particular sectors of the economy (as discussed above) since it generally involves a small number of rather large projects. The approach advocated here is more conducive to decentralization and diversification.

(2) The advanced hardware approach is almost certain to lead to much greater problems with foreign exchange than the techniques discussed here, since the hardware is to be imported from the advanced countries. Indeed, the "foreign exchange gap" becomes one of the most pressing issues of public policy with that approach.²³ However, the local-regional subsidies approach is unlikely to make heavy demands on the supply of foreign exchange due to the nature of industries likely to be encouraged by such efforts. The capital-intensity requirements may be less severe and the capital equipment to be imported is likely to be less expensive, and require fewer imported parts and service materials. Furthermore, these subsidies would generally encourage the utilization of the abundant factors. The subsidized firms, therefore, would fit into the pattern of comparative advantage and in this regard would tend to *add* to the supply of foreign exchange. And, of course, subsidies might be used to attract foreign capital.

Local or regional subsidies tend to decentralize decisions and add flexibility to development programs²⁴ and this could be of particular significance in cases where national efforts have leaned heavily toward the advanced hardware approach and where this approach has created a capital structure that makes heavy foreign exchange demands while contributing only moderately to the employment of domestic resources. Local efforts are more likely to promote investments compatible with relative factor endowments and subsidy funds will be used more productively in those industries. Such investments tend to promote the full utilization of domestic resources and that will be important where national efforts are concentrating on the more glamorous and expensive technology from the advanced nations.

Advanced capital equipment from the developed nations tends to reflect the relative factor scarcities and prices prevailing in those countries. When such equipment is imported into the developing countries it does not reflect

²³ Advanced hardware advocates seem to favor extensive use of exchange controls and tariffs to cope with the gap. See Linder, *op. cit.* Unfortunately, these measures make any apparent "efficiency" of the approach even more misleading. Under those conditions true costs are higher than apparent costs because the controls make foreign exchange cheaper than market conditions justify. Overvalued currencies tend to encourage the use of capital intensive techniques by concealing the true cost of the capital, and this is one reason developing countries sometimes import surprising amounts of capital-intensive equipment in the face of labor surplus conditions.

²⁴ Bauer and Yamey emphasize the importance of decentralized decision-making. Aside from obvious political safeguards, decentralization may lead to greater efficiency via better mobilization of knowledge and the provision of incentives. See Peter T. Bauer and Basil S. Yamey, *op. cit.*, p. 154 and pp. 201-204.

the factor scarcities existing there, that is, abundant labor relative to capital. Such equipment tends to be capital intensive and labor saving. This is a questionable approach to development under labor surplus conditions, even when dynamic aspects of the problem are considered.²⁵ While industrialization will generally increase employment opportunities, this approach to industrialization may provide only a mild stimulus to the employment of domestic resources.²⁶ Capital equipment of a less expensive variety would ordinarily embody a technology making greater utilization of available labor. Of course, the main body of orthodox price theory indicates the superior efficiency of combining resources in manners compatible with existing relative prices. Those arguing the efficiency of alternative combinations have a heavy burden of proof.

One probable objection to the idea of local or regional subsidies in less developed nations is that the areas where they would be most desirable would be the areas that could least afford them. There is an element of truth in this. Nonetheless, local development efforts in the United States have been largely concentrated in the areas of lowest income. And the industrial expansion coming from these development efforts have had a very significant impact on local income and employment in many instances. The basic issue, of course, is what localities should do when they find themselves outside of the mainstream of development. Of course, a plausible case can be made that some provision should be made by the central government to facilitate development of the area.²⁷ Whether this would be an ideal solution is beside the point. As a political reality, it may be impossible to so influence the central government, at least in the foreseeable future.²⁸ This is more a ques-

²⁵ Nurske has stressed this factor. For instance, he argues that in building a road in an overpopulated agricultural country "it would be fantastically uneconomic to equip each worker with a bulldozer." Considering the abundance of labor, much simpler tools and equipment may be more appropriate as labor intensity takes priority over capital intensity. See Ragnar Nurske, *Problems of Capital Formation in Underdeveloped Countries and Patterns of Trade and Development*, New York, Oxford University Press, 1967, pp. 45-47 and elsewhere.

²⁶ Some writers assume that the advanced hardware approach to industrialization will greatly stimulate the employment of domestic resources, and they depreciate the role of less sophisticated capital equipment in promoting employment and development. See Linder, *op. cit.*

²⁷ Louis Lefebvre underscores the importance of not neglecting regional development problems in developing nations. See Louis Lefebvre, "Regional Allocation of Resources in India," in *Regional Development and Planning: A Reader*, edited by John Friedman and William Alonso, Cambridge, Massachusetts, The M. I. T. Press, 1964, pp. 642-653. India in recent years has been attempting to redevelop village industries. See Henry H. Villard, *Economic Development*, New York, Holt, Rinehart and Winston, Inc., 1963, pp. 193-194.

²⁸ The fact that some developing nations are aware of and concerned about regional problems is demonstrated by some of the papers presented at the first study conference on problems of economic development organized by the European Productivity Agency and held in Bellagio, Italy, June 19-July 1, 1960. See *Regional Economic Planning: Tech-*

tion of internal politics than it is of economic realities. Thus the real issue is not whether local subsidies constitute the optimal strategy. It is rather whether it is the best strategy of those *actually open* to the low income area. In many cases it is virtually the only strategy available. If steps are not taken to break down the barriers to local development, existing regional income differentials will persist to the detriment of the low-income regions and the nation. It is an unfortunate reality of life, however, that often the only important help available to the poor is the help that they can provide for themselves.²⁹ Public opinion in the prospering areas is likely to view explicit development effort as economically unsound. Nevertheless, low income areas may find immediate and tangible results from local subsidies. The subsidy-induced expansion may provide a stimulus to the local economy that otherwise, in fact, might never occur.³⁰ In the United States, the rates of return realized by localities on their subsidy investments have been very high and are still extremely profitable.³¹

Another possible objection arises from the fact that conditions in the deprived areas of advanced nations differ from those in lagging regions of underdeveloped nations, and subsidy policies that are successful in the former may not be equally applicable in the latter. One reason being that subsidiary governments in underdeveloped nations are not as effective in terms of their fiscal and legislative powers as they are in the United States, where the divi-

niques of Analysis for Less Developed Areas, edited by Walter Isard and John H. Cumberland, Paris, Organization for Economic Co-operation and Development, 1961. Awareness of the regional problem appears to be of fairly recent origin and attempts at regional solutions are almost always initiated and directed by the national government. Even if the central government does eventually attempt to come to the rescue of the various regions within the country, there is little assurance that national policy would be compatible with existing regional resource endowments. The uniformity that is inherent in national policy probably would not permit sufficient diversity to enable regions to take full advantage of the varieties in the regional resource base.

²⁹ Fei and Ranis have argued this point. They state, "...in the case of large labor surplus type of underdeveloped economy, successful transformation to economic maturity is basically a domestic matter. While trade and aid can play important facilitating roles, ... they are unlikely to be decisive. If the development effort is to be successful in the sense of the economy's reaching its goal of economic maturity, the essential growth-promoting forces must spring from a perhaps initially slow and gradual, but ultimately massive, transformation of the domestic economy." See John C. H. Fei and Gustav Ranis, *Development of the Labor Surplus Economy: Theory and Policy*, The Economic Growth Center, Yale University, Homewood, Illinois, Richard D. Irwin, Inc., 1964, p. 6. Also see Nurske, *op. cit.*, pp. 140-141 and Bauer and Yamey, *op. cit.*, p. 133 for essentially the same points.

³⁰ Fei and Ranis appear to have had this in mind in the following passage: "Finally, inducing the rural location of industries, through industrial estates, for example, may be of considerable help in attracting agricultural savings which might alternatively not have been available at all." Fei and Ranis, *op. cit.*, p. 53.

³¹ James R. Rinehart, "Rates of Return on Municipal Subsidies to Industry," *Southern Economic Journal*, Vol. 29 (April, 1963), pp. 297-306.

sion of power among the levels of government gives considerable independence to subsidiary governments. Local and regional governments in most underdeveloped nations are not so favorably situated.³²

This fact does not destroy the case for subsidization by lagging regions. However, it does have implications. The most obvious being that it may be unwise to attempt simply to duplicate programs used in the United States. But this is of minor importance since the diversity of possible programs permits wide latitude in implementation and allows localities to create and initiate their own plans according to local conditions and needs. For example, subsidiary governments might be unable to raise sufficient funds via routine taxation,³³ as many communities have done in the United States. One approach would be a payroll subsidy.³⁴ There would be no immediate cost, as subsidies would be paid out of future earnings. Another possibility is taxation payable in labor services that benefit the new enterprises. Much of the potential savings in underdeveloped countries is in the form of disguised unemployment and³⁵ a variety of subsidy techniques might be devised to facilitate the transfer of surplus labor into new enterprises, especially of the small scale variety.

Also, where subsidiary governments are especially inept or powerless, development programs might be handled better by non-governmental agencies. In fact many such endeavors in the United States have been inaugurated and controlled by private groups with little or no government assistance. The nonprofit industrial committee or corporation has been a common organizer, innovator and implementor of subsidy plans.³⁶ All that is usually required is a few citizens with sufficient interest and foresight to organize a group and imbue its members with the same spirit.

CONCLUSIONS

Local or regional efforts cannot solve all of the development problems facing a nation and no inferences to the contrary are made here. The authors wish only to indicate the potential advantages of increased efforts along these lines. Such activity can make a positive contribution, and this should be recognized to the extent of actively encouraging these efforts in the develop-

³² The authors are indebted to Clinton Whitehurst for this point.

³³ An interesting examination of the problems associated with taxation as a source of funds for economic development is found in Bauer and Yamey, *op. cit.* pp. 194-201.

³⁴ For a discussion of the payroll subsidy plan see Moes, *op. cit.*, pp. 149-152.

³⁵ Nurske, *op. cit.*, pp. 46-49. A good deal of controversy has arisen in response to the disguised unemployment doctrine in connection with underdeveloped countries. Much of the controversy stems from semantic difficulties and from disagreements as to the actual magnitude of the phenomenon. For a good treatment of the literature dealing with this problem see Charles H. C. Kao, Kurt R. Anshel, and Carl K. Eicher, "Disguised Unemployment in Agriculture: A Survey," in *Agriculture in Economic Development*, ed. by Carl Eicher and Lawrence Witt, New York, McGraw-Hill, 1964, pp. 129-144.

³⁶ Donald R. Gilmore, *loc. cit.*

ing countries. Local and regional efforts may accelerate industrialization by providing new incentives to save and invest. Development may be encouraged by the formation of external economies in the less developed areas. This in turn will promote not only the growth of industry, but its decentralization. And where labor immobilities exist this will have important economic advantages. Industrial decentralization has at least two other significant aspects that will only be mentioned here. It will contribute to the control of the external diseconomies that generally accompany congestion and the growth of very large urban areas. There is a social cost to congestion and pollution.³⁷ Secondly, decentralization may have certain national defense advantages, especially in the nuclear age.³⁸ It should be clear that local or regional efforts may supplement, and possibly even correct within limits, national development efforts.³⁹ The less developed areas of a country would, of course, be interested in the policies not because of their national advantages but rather because of the immediate benefits to the area. Their interest is that of moving into the economic mainstream of the country.

Local and regional subsidization is not a panacea, and many other developments are necessary before full prosperity can become a reality. For there are physical, legal, political and educational barriers to development; transportation, communication and currency difficulties, etc., that must be overcome. But local initiative toward industrialization is compatible with other efforts whether public or private, national or international, and will buttress and expedite the growth process.

Local and regional efforts can make a positive contribution to national as well as area development and this should be recognized by governments in the developing countries. They would be wise to facilitate these efforts where artificial handicaps exist and to encourage actively these efforts where local or regional initiative is slow.

³⁷ For a discussion of some of these matters see Anthony Downs, "Metropolitan Growth and Future Political Problems," *Land Economics*, Vol. 37 (November, 1961), pp. 311-320, H.B. Schechter, "Cost-push of Urban Growth," *Land Economics*, Vol. 37 (February, 1961), pp. 18-31, and O. Ornati, "On Metropolitan Growth: A Review of Recent Literature," *Social Research*, Vol. 28 (October, 1961), pp. 359-369. Of particular interest is Oliver C. Winston, "An Urbanization Pattern for the United States: Some Considerations for the Decentralization of Excellence," *Land Economics*, Vol. 43 (February, 1967), pp. 1-9.

³⁸ D. V. T. Bear and P. G. Clark, "Industrial Survival in Nuclear War," *Quarterly Review of Economics and Business*, Vol. 1 (August, 1961), pp. 39-51. Also of interest is Joseph J. Spengler, "The Economist and the Population Question," *American Economic Review*, Vol. 56 (March, 1966), pp. 13-21, and Hoover, *op. cit.*, pp. 294-296.

³⁹ For another view of the subsidy question, see James H. Thompson, "The Community Subsidy to Industry," *Business Horizons*, Vol. 6 (Spring, 1963), pp. 45-56, and Sanders A. Kahn, "Stop Giving Away America," *The American City*, Vol. 66 (May, 1951), pp. 106-107.