A REGIONAL FRAMEWORK FOR GOVERNMENT EXPENDITURES

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A decade has passed since the passage of the Employment Act of 1946. While there have been fluctuations in the level of income and employment, it is clear that there have been no major recessions. Indeed, with a substantial margin of safety, one may assert that the state of economic knowledge is such that we need not fear either a major recession or runaway inflation. At the same time, economists have come to recognize—in a more formal manner—the inherent difficulty in setting an optimal level of Federal Government goods and services when viewed as satisfying public wants in contrast to providing stability. Current budget struggles provide the real-life counterpart to the formal problem.

At the regional level a curious twist occurs. Here a body of knowledge with respect to the forces determining regional income is just beginning to emerge. The policy tools with which to promote regional stability and growth are practically nonexistent. At the level of providing the correct amount of goods and services the impasse found at the Federal level becomes less of a problem. With the volume of State and local expenditures amounting to almost half that of the Federal Government, one might expect half the noise and debate which has occurred at the Federal level. This does not seem to be the case. At the State and local level, the voter as a consumer may have a better mechanism to register his preferences.

Without considering the technical details, these, then, are the points I should like to cover in this paper: (1) The state of economic knowledge with respect to the forces determining regional income as a background for the role of government expenditures; and (2) the optimal level of State and local services when viewed as satisfying the public demand for goods. It is worth while, however, to note first why regional economics is of vital interest to all concerned—aside from its academic interest.

Regional Economic Analysis: Background

On a priori grounds it is safe to state that during any week each Member of Congress is deluged with requests concerning some phase of economic activity in his political district. One need not look far for signs of promotional activity beckoning industry to some area. Newspapers, magazines, and other publications abound with such advertisements.

It is not necessary to go into details to point out the wide variations in economic activity among regions. Per capita income, for example, varied from $2,858 in the highest State to $964 in the lowest in the year 1956. Per capita expenditures on government goods and services also exhibit wide regional variations. The occurrence of various E or disaster areas indicates that unemployment levels are by no means uniform throughout the Nation. Finally, studies have shown that different areas of the country are growing at different rates.[1] This is not only true in terms of population, but also true in terms of per capita income.

The Forces Determining Regional Income

In view of the wide variations in the level of regional economic activities, it is worth while to focus attention on the factors influencing the level of one key variable, regional income. In discussing regional income it is important to keep two sets of cases quite clear. One may consider short-run regional income, say over a business cycle. This is to be contrasted with a study of the factors behind long-run regional growth. A second difference notes the type of income change. The income of a region may rise simply because of increased population. It need not involve a change in per capita income. At the other extreme, it may be that the income of a region rises with population unchanged. This, of course, implies an increase in per capita income. The fact that reality contains a mixture of these two sources of income change should not distract attention from the importance of this distinction—the effect of which will be discussed below.

Short-run regional income

The factors which determine the level of short-run regional income have recently come in for a fair amount of study. In general, the same forces which determine the level of United States income determine the level of regional income. The major difference—as a matter of degree—is the dominant role of exports to other areas of the country. Clearly, the smaller the region under consideration, the more vital its exports to other areas.

One point, which will be important in policy considerations, should be noted. Multiplier analysis tells us the total amount of income change generated by a given change in some key magnitude. An increase in net investment in the private sector, for example, increases income above and beyond the amount of the original increase. This same sort of multiplier analysis holds true for regions.

For a region, however, the magnitude of the multiplier varies with the size of the region under consideration. In a small community the value is quite close to one. That is to say, the effect on income and employment in the community is largely limited to the value of the original injection. This may be illustrated by a simple example.

Suppose a recession hits an industrial area such as South Bend, Ind. As the level of manufacturing income falls, the income of employees in local industries such as retail trade also falls. In order to offset this decline, Government contracts are assumed to be placed with South Bend firms. Incomes in the area will rise (1) as a result of increased direct income to manufacturing employees and (2) as a result of these workers' spendings on local goods such as retail

[1] Gloria J. Hile and Wolfgang Stolper, Regional Economic Development in the United States, Weltwirtschaftliches Archiv, 69 (February 1952), 41–76.

trade, the incomes of the persons engaged in these activities will also rise. However, there will be a rise in income outside the area as dollars flow out of South Bend to purchase consumers' and manufacturers' goods.[2] The proportion of these dollar losses or leakages out of the community will determine the value of the multiplier effect on the region.

By way of contrast, consider a region defined as the Corn Belt. Here a farm policy to offset an income decline will have the same sort of effect. The increased income of the farmer creates increased income to retailers. Again, some leaks out of the area, but because of the size of the region the proportion is less than in a South Bend. This means a higher multiplier and more effect per dollar of Government expenditures.

Thus, policies which seek to boost the income of a region must recognize and allow for these different leakage values. If this is not done, the total impact on the region under consideration will be less than the desired impact.

Diversification myth

Another aspect of regional cyclical stability needs to be considered. This concerns what might be termed the "diversification myth."

It is common to hear various agencies concerned with regional economic matters put forth the call for industrial diversification. The common cliches are "broad base," "all the eggs in one basket," and so forth. Implicitly the assumption is that a region's economic stability will be insured if the area's activities are diversified. A 1-firm community or a 1-industry region is viewed with substantial misgivings. The closing of textile mills in some New England communities, coal mines shutting down, the cancellation of Government contracts, all provide examples of a real source for this fear.

There is another side to the issue of diversification which should be considered. A region which reaches the ultimate in diversification might be described as a miniature equivalent to the United States economy. In turn, its level of activity could be expected to fluctuate with the national average. Yet, it is questionable if this is a desirable goal. Those communities whose cyclical sensitivity is less than the national average may only introduce greater instability through diversification. Thus, a community whose sole product is baby food may find its income stable during business fluctuation. The introduction of a steel mill, although it will raise the income, probably will not add to the stability of such a community. Diversification for its own sake is not necessarily a desirable goal.

Regional Economic Growth

Economic growth in general has recently received a good deal of attention among economists. Regional growth, here defined to encompass regions within the United States, has received less attention. At the present state of knowledge and especially with the bundle of available data, not as much can be said at the operational level concerning regional economic growth as one might like. It is, neverthe-

[2] This poses an awkward problem if other areas of the Nation are at full employment. It implies that to offset deflation in one region, you introduce inflation in another region. One might call this regional bottleneck inflation.

less, worth while to distinguish different sources and types of regional growth. Failure to recognize alternative sources and types of growth can lead to serious misjudgments at the policy level.

Two polar cases of regional growth involving population change may be distinguished. In one case population grows and, in a sense, attracts industry. In the latter case industry moves into a region and attracts the population. Recent growth in California may be cited as an example tending toward the former type. A Government atomic energy city provides an example of the latter. Reality, of course, shows a blending of the two poles in a simultaneous process.

Government, when allocating its expenditures on a regional basis, should take account of these alternative forms of growth. If two regions are alike in their growth potential, Government policy with respect to the location of, say, a dam, will give one region an advantage. Welfare will be enhanced if this region also happens to be a place in which people wish to live as opposed to a less desirable area. This is not to say that policies should only be aimed at developing areas where people wish to live. It merely suggests that this is a factor to be considered.

Perhaps the most important issue in regional growth analysis concerns itself with raising per capita income within regions. Regional per capita income grows as regions become more productive. Regions, however, do not become more productive at a uniform rate. Indeed, evidence indicates that there are important regional differences in growth rates.

A question involved at the policy level is, What growth rates should be considered optimal? Should all regions grow at the same rate? Should regional growth rates be determined by natural market forces with the Federal Government trying to play the difficult role of the neutral agent? Should Federal policy aim at providing growth rates such that lower per capita income regions tend to catch up with higher income areas? Clearly, other criteria along this line could be raised. It is a problem in the area of equity and fiscal federalism.[3]

Regardless of which policy is considered, it is important to look into (1) the factors behind regional income differences and (2) the conditions for regional growth. Fortunately, the work of Frank Hanna provides interesting insight into the first area.[4] An earlier work of the author may be called upon in understanding the conditions for regional growth.[5]

In general, two factors account for differing per capita income in different regions: (1) Differences may reflect differences in regional industrial structures, one being more productive than the other or (2) differing wages may be paid for the same type of employment. Changes in the location of industry will bring about changes in the type of industrial structure. Mobility of labor and other forces which tend toward uniform wages for the same type of employment clearly influence the equality of regional per capita income.

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[3] See: James M. Buchanan, Federalism and Fiscal Equity, American Economic Review, XL (September 1950), 583–599.

[4] Frank A. Hanna, State Per Capita Income Components, 1919–51, Review of Economics and Statistics, XXXVIII (November 1956), 449–464.

[5] Charles M. Tiebout, Exports and Regional Economic Growth, Journal of Political Economy, LXIV (April 1956), 160–169.

As a matter of historical record, Hanna's investigation of the period 1919–51 notes:

> The changes in the relative interstate dispersion of wages and salaries is more a result of selective wage-equalization shifts within industries than of the industrial composition of the States becoming more alike.[6]

The conditions responsible for changes in a region's industrial structure as an element in regional growth, are now considered. In essence, regions will grow if they can compete with other regions in the export market. This implies an ability to produce at lower cost. This may be illustrated by a simple example.

Suppose a new peninsula were formed off the New Jersey coast. Assume that a coal deposit is found some 200 miles out on the peninsula. Will it be mined to compete in the New York market with Pennsylvania coal? Make one further assumption about the region. Assume that the rest of the area is all sand and marshland. If workers are to mine this newly found deposit, they must eat, and hence there must be imports. If the cost of these imports is high enough, no coal will be mined, and no export base will develop.

Contrast this with a situation in which the peninsula is rolling, fertile countryside. Truck gardening and dairy farming can develop. Some imports will still flow in, but some local needs—vegetables and milk—will be supplied locally, that is, supplied by local activities. Under these conditions coal may be mined because of the lower cost of production, in this example, lower dollar wages.

A region will grow, then, if the endowments are favorable. Yet, it should be noted that the endowments are not all natural. In the past and in the future, government policies have and will continue to give regions advantages in ability to attract industries. This, of course, reverts back to the issue of the proper government policy for regional growth.

Before concluding the discussion of regional growth forecasting possibilities should be discussed. With the present resource tools and especially available data, it is extremely difficult to forecast regional growth pattern. What the impact of, say, the St. Lawrence seaway will be on the Midwest, is difficult to ascertain. Assuredly, income will rise, but how much is not easy to forecast. Policymakers should be wary of persons who come up with precise projections of regional growth.

State and Local Expenditures and Consumer Preferences

Previous discussion has concerned itself with the analysis of short- and long-run regional income. The objective was to present the framework in which governmental policies could then be introduced to play a role in stabilizing regional income and promoting regional growth. Here it is assumed that this problem is solved. Now the question of the optimal level of State and local expenditures and taxation in terms of want satisfaction is considered.[7]

[6] Op. cit., p. 464.
[7] Charles M. Tiebout, A Pure Theory of Local Expenditures, Journal of Political Economy, LXIV (October 1956), 416-424.

Governments, having undertaken to supply some goods and services to the public, must decide how much to supply. This brings into focus the mechanism, or lack of one, by which consumer-voters register their preferences. The consumer-voter is, in a sense, surrounded by a government whose objective it is to ascertain his wants for public goods and tax him accordingly. Recent research has shown there is no satisfactory mechanism to indicate these wants at the Federal level.

At the State and local level this is less of a problem. Here consumers do exercise some choice in the quantity and quality of public goods provided. This is done in a manner somewhat different from the usual market process. Choice is registered to some extent through the mobility of the population. Perhaps this is best illustrated by an example.

Consider for a moment the case of the city resident about to move to the suburbs. What variables will influence his choice of a municipality? If he has children, a high level of expenditures on schools may be important. Another person may prefer a community with a municipal golf course. The availability and quality of such facilities and services as beaches, parks, police protection, roads, and parking facilities will enter into the decision-making process. Of course, noneconomic variables will also be considered, but this is of no concern at this point.

The consumer-voter may be viewed as picking that community which best satisfies his preference pattern for public goods. This is a major difference between central and local provision of public goods. At the central level the preferences of the consumer-voter are given, and the government tries to adjust to the pattern of these preferences, whereas at the local level various governments have their revenue and expenditure patterns more or less set—here we assume they are fixed. Given these revenue and expenditure patterns, the consumer-voter moves to that community whose local government best satisfies his set of preferences. The greater the number of communities and the greater the variance among them, the closer the consumer may come to fully realizing his preference position.

There are two questions which arise immediately: (1) Do consumer-voters really bother to exercise choice in picking a community; and (2) are there enough different areas where consumers may move to register their preference? While no adequate study has been made concerning the variables people consider in choosing a residence, such studies as do exist indicate a surprising awareness. This is especially true with respect to the service public schools.

No doubt, there are not sufficient communities in which to live such that the consumer-voter finds just the right place. As a matter of degree this is especially true at the State level. However, when smaller suburban communities are considered greater choice is offered. And insofar as this process does give the consumer-voter a choice in the level of goods and services offered, it provides a case for a greater proportion of goods and service expenditures supplied by State and, especially, local governments.

An immediate, and often overlooked, qualification is in order. When considering the whole array of government goods and services two types may be distinguished: (1) Those where all consumers' preferences are accounted for and, insofar as possible, allowed free rein. Consumers who want more parks get them and in turn pay appropriate taxes. Those who do not want parks go elsewhere and, in turn, do not pay for them. (2) Another set of goods are of a "sumptuary" nature. In this case, the majority of voters have decided that all shall use a good and, in turn, pay for the good. Public education is an example. A majority sumptuarily imposes its will on a minority on the grounds that it knows what is best.

This division of goods holds true at the Federal and non-Federal level. The question is who shall decide what goods are to be sumptuarily imposed, the governments concerned or higher levels of government? Experience with unemployment compensation, public education and so forth, indicate the areas where this sort of question is applicable. It is again a question of federalism.