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FISCAL EQUALIZATION REVISITED

PROFESSOR JAMES M. BUCHANAN,
Nobel Laureate

Equalization: Welfare Trap or Helping Hand? (PAPER #1)

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by

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James M. Buchanan, Nobel Prize winner in Economic Science, 1986, is currently Advisory General Director of the Center for Study of Public Choice and Harris University Professor at George Mason University. Professor Buchanan received his doctorate from the University of Chicago (1948) and subsequently taught at the University of Tennessee, Florida State University, University of Virginia, UCLA, and Virginia Polytechnic Institute and State University where he established the Center for Study of Public Choice. He moved from the Center to George Mason University in 1983. Holder of four honorary doctoral degrees from Universities worldwide, and Distinguished Fellow of the American Economic Association, Professor Buchanan is author of over thirteen books and hundreds of articles in the areas of public finance, public choice, constitutional economics and economic philosophy. He is best known for such works as *Fiscal Theory and Political Economy, The Calculus of Consent, The Limits of Liberty, Democracy in Deficit, The Power to Tax,* and *The Reason of Rules.*

Section 1
Introduction

A full half century has gone by since my early involvement in analyses of fiscal equalization in federal political settings. Indeed, this subject matter was my first research concentration. I advanced arguments for policies aimed at fiscal equalization among the states or provinces of a federalism in situations where there are disparities in fiscal capacities. My arguments were analytically abstract and they were developed independent of reference to the fiscal or political structure of any existing country. My defense of fiscal equalization was grounded in considerations of both equity and efficiency. The analyses in these early papers were developed before Samuelson's seminal contribution to the theory of public expenditure (Samuelson, 1954). Two decades after my first efforts, I returned to a related set of issues although with a different purpose (Buchanan and Wagner, 1970; Buchanan and Goetz, 1972).

Neither a half-century past was I, nor am I now, sufficiently familiar with the Canadian political-fiscal experience, historically or currently considered, to make informed commentary. I know only that Canada did develop and put in place a structure of equalizing grants, and that policies establishing this structure may have been defended on arguments that I had advanced. I also know that, now, at the beginning of the new century, the Canadian structure of fiscal equalization has been severely criticized for its long-run effects in creating dependency on the part of the citizenry and their political leaders in provinces with relatively low fiscal capacities.

I shall not enter this debate. Now, as before, competency constraints require me to remain at the level of abstract considerations. What I propose to do is to take another look at the arguments that were advanced in the early papers, and to try to answer the question: Where do I now stand on fiscal equalization?

As noted above, the formal theory of public economics is much more sophisticated than it was a half century ago. But also, and importantly, public choice theory has emerged that provides a much more plausible understanding of how the political structure works. Any modern assessment must do more than lay down criteria for idealized structures that embody either equity or efficiency criteria. The feedbacks between any policy implementation and political behavior must be reckoned with in any evaluative judgment. I now recognize that my early papers fit squarely into the then-traditional conventions which embodied the presumption that the economist is engaged in proffering advice to a benevolent and omniscient government. Although I had been exposed to the advice of Knut Wicksell for several years prior to writing those early papers, his message had not yet been fully inculcated into my thought processes.

Section 2
Federalism as the Source for Fiscal Disparities

In a unitary state that is roughly coincident in territorial limits with the primary economic nexus, the particular set of problems relevant for the equalization debates does not arise. If we leave strict locational rents out of account, a person will be, ideally, at least in western democracies, treated similarly regardless of geographic location within the political boundaries. Or to put this point differently, if more generally, there are no strictly fiscal disparities that stem from location, as such. The central government levies taxes on the whole membership of the inclusive jurisdiction and finances public goods benefits on behalf of the whole polity as determined by the operation of established institutional structures.

The fiscal disparities that become relevant for considerations in the equalization discussion arise exclusively from the federalized political structure in which provincial or otherwise designated subordinate units of government possess independent taxing and spending authority. And independence here means precisely what it says; there is no necessary coordination between and among the taxing and spending activities of the separate provincial units. The political decision processes within each unit generate and impose patterns of taxation and spending in accordance with localized conditions and circumstances, including the ultimate preferences of citizens.

This feature is generally regarded as a praiseworthy attribute of federal structures; the separate, and smaller, governmental units can more accurately translate the preferences of constituents into fiscal results. Further, the potential for competition among different provincial units can, within broad limits, insure that, despite the absence of individualized market-like exchanges, tolerable efficiency may be achieved (Tiebout, 1956). Save for comparisons through international league tables, no such competitive pressure toward efficiency exists for central government provision of goods and services. Federalism, in itself, acts to reduce the range and scope for central government action through the devolution of authority to the provincial units.

Nonetheless, and despite the acknowledged advantages of federalized structures of governance, problems arise that are not present under unitary governmental organization — problems that involve fiscal disparities among separate units. Federal polities are, almost without exception, at least I do not know of any exception, organized with the separate provinces delineated geographically or territorially, whether the origins of the boundaries are based on historical development, as in the United States, on geographic convenience, or on arbitrary circumstance. It is as if the map of the inclusive polity is laid

out and a pattern is imposed on it by a cutter-like device — a pattern that sets up localized political-fiscal authorities but which does not, at the same time, interfere seriously with the flow of goods, services, and resources across the regional boundaries within the whole economy.

There is no direct relationship between the setting out of the regional or provincial boundaries and the emergent pattern of resource flows across the whole economy — a pattern that may, itself, be examined for its geographic configurations. Indeed, the political boundaries that define the authority of the separate provinces of any polity may have existed and remained unchanged for many years, perhaps centuries, whereas the locational patterns that describe the economy are continually changing in a ongoing dynamic process of adjustment.

At any moment in time, and perhaps continuing through time, significant differences is income and wealth levels among the separate regional units would be present — differences that may be traceable to historical, stochastic, or geographic sources. The inclusive tax bases for the separate governmental units will differ, perhaps substantially, even as defined in per person terms. The fiscal capacities of the provinces or states will differ, one from another. The rate of tax on the aggregate tax base that is required to finance any given quantity of publicly supplied goods, measured in per person units, will be higher in those units with the relatively lower fiscal capacities.

Any person who is a resident of a province with the relatively lower fiscal capacity is necessarily placed at a fiscal disadvantage as compared with the position of an otherwise identical person who is a resident of a province with a relatively higher fiscal capacity. It is important to understand precisely why this fiscal advantage or disadvantage enters into a possible locational calculus. It may be useful to compare the ordinary purchase of private goods in the market with the "purchase" of public goods through the provincial budgetary process.

In the stylized market setting, an individual faces the same price for a unit of good regardless of location, aside from equalizing differences due to transport costs, and, further, all persons face the same price. In the public goods setting, by contrast, the effective tax-price that confronts the individual demander differs as among persons. Under governmental provision, each person is supplied with the same quantity of the public good. Hence, individual adjustments in demand must be made in the price rather than the quantity dimension. And, in the public goods solution, separate individualized tax-prices must be added up to cover the costs of supplying the public good. In the public goods "market," no matter how efficiently organized it is, separate persons, as demanders must, as taxpayers, share in the costs as well as the benefits. Recognition of this basic feature of "publicness," which necessarily characterizes governmental fiscal action, implies that the position of any person is determined, in part, by the identification of others with whom such a person shares the fiscal "purchase" of public goods.

In simple terms, a person is better off if she lives in the same sharing unit with a rich neighbor rather than with a poor neighbor because the rich neighbor will have a higher demand for the shared good

than the poor neighbor. And this relatively higher demand will be translated, through the institutions of taxation, into higher tax prices. For any given quantity of good, therefore, the tax-price facing the person whose position we examine here will be lower than it would be should the neighbor be poor rather than rich.

Given the existence of independent and separate fiscal authorities, the boundaries of which include differing levels of taxable capacity, location is an important determinant of the economic position of any person, over and beyond any in-market adjustments. The economic characteristics of those with whom a person shares fiscal interaction at the provincial level matter for that person's well-being.

Section 3
Allocative Incentives under Fiscal Disparities

The analysis sketched out above cannot be challenged. The relevant questions arise only when the implications of the analysis are examined. Do or do not the modified incentives present in federal structures when fiscal disparities exist generate resource distortion? The answer to this question leads directly to the judgment as to the efficacy of an equalizing scheme, at least conceptually.

We may resort to a framework of comparative equilibria, familiar to economists. Commence with a setting in which all publicly financed and supplied goods and services are processed through the central government; no overtly regional fiscal discrimination is in being. Now impose a single major change; henceforth, a substantially large sector of the inclusive public economy is devolved to the separate provincial authorities, in the presence of disparities in per capita incomes and wealth among units. As the above analysis demonstrates, the fiscal position of any and every person in the provinces with relatively lower fiscal capacities is reduced by this organizational-political change. This result holds independent of how the particular units respond to the organizational shift.

There now emerges an incentive for interregional, interprovincial migration from the relatively low-income regions to the relatively high-income regions. If there are no specific offsetting policy initiatives, the interregional migration will proceed until a new equilibrium is attained — one that will involve a relatively larger population in the relatively high-income regions than in the equilibrium prior to the devolution of authority.

Is the post-federalization equilibrium inefficient or efficient? Is it nonoptimal or optimal in the strict Pareto sense? In their careful 1972 analysis of this model, Buchanan and Goetz concluded that there is nothing in the modified incentive structure, per se, that insures attainment of the Pareto surface. They also concluded, however, that the particular directional pattern of resource distortion could not be determined. The Buchanan-Goetz emphasis centered on the fact that shifts of persons among provinces generate fiscal externalities, with the relative effects of these externalities dependent on the characteristics of the budgetary bundle in the particular regions examined.

A move of a person into a province, other things equal, reduces the tax shares of those who are in the jurisdiction; hence, tax-side externalities are positive for the province of in-migration and negative for the region or province of out-migration. But the move of a person also has benefit side effects. In the limit-

ing case, of extreme "publicness," in-migrants can share in benefits without imposing costs on prior residents. In more realistic cases where the total costs of provision depend directly on the number of persons supplied, and, also, on the possibility of congestion of publicly supplied facilities, in-migrants may impose benefit-side costs on prior residents. Whether or not the modified set of incentives set up by the federalization of some part of the fiscal budget induces too large or too small a number of persons in the relatively favored regions depends on the values of the external effects. The Buchanan-Goetz conclusion was negative to the effect that there is nothing in the modified incentive structure, as such, that will tend to further the satisfaction of the Pareto norm for efficiency in resource usage.

As applied to the earlier debates on fiscal equalization, the Buchanan-Goetz result is nihilistic. The argument offers no support for fiscal equalization, but neither does the argument offer grounds for the no-equalization stance.

Section 4
Fiscal Capacity as an Exploitable Commons

I propose, now, to move beyond the Buchanan-Goetz nihilism, and to use a different analytical construction that may allow somewhat more definitive conclusions to be reached. To my knowledge, the metaphor of the commons was not explicitly introduced into the earlier equalization discussion, although I acknowledge here that I have not searched the literature adequately. Nonetheless, let me proceed.

The specific label "tragedy of the commons" was introduced by Garrett Hardin in 1968, but the logical structure was familiar to economists throughout the century. Its early formulation was contained in Pigou's illustration of the two roads — the good but narrow road and the wide but rough road, both linking the same destinations. Pigou argued that if usage of the roads is open, relatively too many vehicles will use the narrow road; its usage will be congested. A superior allocation would involve a shift of vehicles to the wide and rough road. Knight (1924) pointed out that the problem only arises because property rights are not established in the facilities, in this case, the roads. With privatization, the owner of the good road will have an incentive to charge prices that will maximize rents on the good road, thereby insuring optimal allocation as between the two roads. A. D. Scott (1955) and H. Scott Gordon (1954), both Canadians, applied the analysis to common fishing grounds in the 1950s.

How might the basic model of the commons be applied to the problem introduced by the fiscal disparities among provincial units in a federalized polity? The willingness of the relatively high-income recipients, concentrated in certain provinces, to pay larger shares in publicly supplied goods to be made available on equal access terms to all residents of those provinces is a resource that is genuinely productive of economic value. But it is also a resource that may be overexploited if persons are allowed free and open access. Efficiency requires that the resource be used to its value maximizing level, but not beyond.

By presumption here, but also from empirical reality, persons remain free to migrate freely across provincial boundaries in response to whatever incentives they face, whether these be market or fiscal in nature. There can be no establishment of ownership rights to membership in particular provinces. Privatization, as a solution, cannot be considered; a regime of privately owned provinces is not on the cards. A substitute scheme of some sort must be found, and fiscal equalization amounts to one such scheme; in effect this scheme becomes a net tax on all those who hold membership in the relatively high-income communities, with revenues devoted to the subsidization of fiscal activities in the relatively low-income communities. In effect, citizens-taxpayers in the relatively high-income communities are offering fiscal

inducements to those who remain in the relatively low-income communities — inducements for the latter group to remain in the less-favored locations.

Several questions remain. Can we be sure that the federalized fiscal setting is analogous to the commons? And, even if so, can we conclude that open migration tends toward excessive exploitation of favorable fiscal locations? Affirmative response to these questions amounts to an assignment of relative values to the fiscal externalities involved in interregional migration. Let me advance a plausible argument.

Consider a highly simplified and stylized example. Suppose that there are two noncompeting groups of income earners in the economy, with persons in one group, say, * , able to command more than those in the second group, **. Suppose, further, that, for various reasons, all members of the first group are located in one province, along with some members of the second group. In other provinces, all persons belong to the second group. The devolution of independent fiscal authority from the central government to provincial governments will, in this setting, set up fiscal advantages for all persons, regardless of income class, who find themselves located in the province with the high-income earners. There will be an incentive for migration of persons as between the regions.

To be analogous to the exploitation of a commons, in-migrants to the rich province must face a schedule of decreasing "fiscal returns." That is, the negative externalities imposed on prior residents must be larger than the positive externalities that stem from the tax side of the account. If this relationship holds, in-migration will be excessive by efficiency criteria because in-migrants will respond to average rather than marginal fiscal surplus, in a manner akin to the familiar overexploitation of any nonowned but productive resource. If private ownership were within the possible, the prior residents, as such owners, would charge immigration fees, which some of the in-migrants would be willing to pay. But since ownership is not possible, since all citizens of the inclusive polity have mobility rights, a scheme of fiscal equalization, administered by the central government, can become a surrogate for the achievement of allocative efficiency. Prior residents and new entrants to the province with the concentration of high-income earners will "purchase" the willingness of others to remain located in the remaining regions.

Section 5
Fiscal Equalization in Practice: The Necessary Politicization of Policy

As noted in the Introduction, the midcentury debates about the desirability and the effects of a system of equalizing grants took place when economists, generally if implicitly, assumed that governments would be able to carry out the policies dictated by agreed upon efficiency and equity criteria. Little or no attention, early on, was paid to the incentive structures within the operation of politics itself. Public choice, as a subdiscipline that extends the economists' framework of analysis to politics, had not yet emerged into analytical consciousness. The economists who participated in the early discussions may have vaguely recognized that, even if the efficiency-driven arguments for fiscal equalization could be demonstrated conclusively, any achievement of the desired results required rather precise implementation, without which perverse resource shifts might occur. These prospects were not, however, sufficiently emphasized in the early treatments.

We may illustrate the point made here by returning to our simple example, with only one modification. Suppose, now, that the relatively poor province contains some high-income earners, but that the overwhelming concentration of such persons is in the other provinces. This change does not modify the analysis, as such. All person in the relatively poor province, rich and poor, are placed at a fiscal disadvantage when federalization takes place. Suppose, then, that a scheme of equalizing grants is put in place. In order for this scheme to be efficiency-enhancing, as designed, the fiscal incentives for *all* persons, rich as well as poor, must be modified. If, however, the coalition politics of the poor, and grant recipient, province should be such that funds are distributed, either in tax credits or benefits, primarily to the low-income earners, those who earn high incomes still face the incentives to migrate. In this scenario, which may well be descriptive of empirical reality, the well-intended scheme for fiscal equalization may produce results that are the opposite of those for which the scheme is designed. The equalizing grants may, in this case, facilitate allocative distortion rather than correction.

An important implication of the point made here is that, even if an idealized scheme of fiscal equalization may be shown to be efficiency-enhancing, the implementation of this scheme may require the satisfaction of specific criteria concerning the distribution of the equalization benefits among taxpayers-beneficiaries in the recipient provinces. The central government, which must, in any case, put any equalization scheme in place, cannot simply walk away from its follow-on responsibilities. A system of bloc grants, made to provincial governments on the basis of some equalization argument, may not be efficiency-enhancing, and for the reasons noted.

Political coalitions in recipient provinces may, however, have direct incentives to administer grant funds in such a fashion as to prevent out-migration of their own resident rich persons. Insofar as the provincial public sector, in net, is redistributive, the out-migration of the relatively rich imposes differentially higher costs on all remaining residents, which will be recognized by political leaders. Incentives of this sort may generate results that are allocatively perverse, but in the contrary direction from those outlined above. The receipt of grant funds may provide recipient governments the opportunity to offer fiscal incentives to its "fiscally attractive" members, over and beyond those required to offset the fiscal disadvantages inherent in membership in the relatively poor regions.

In either of the scenarios sketched out, the well-intended scheme for fiscal equalization may not accomplish its stated purposes. The central government must, in effect, adopt a hands-on policy with respect to the ultimate distribution of the equalizing funds within the poorer regions.

Just as is the case with the provincial governments, however, there is little or no assurance that the coalition structure of central government politics will be such as to allow the economists' idealized scheme for fiscal equalization to be put in place. Even if, in broad and general terms, the potential benefits from a scheme for fiscal equalization are recognized, the details of distribution are determined in the political-decision process and any semblance of efficiency-motivation is unlikely to remain.

In a final or summary evaluation, what is to be said about fiscal equalization in a federalized structure of governance? There is an incoherence or inconsistency between the workings of an integrated national economy, with free resource flows throughout an inclusive territory, and the devolution of substantial fiscal authority to provincial governments, the boundaries of which may include quite different bases for the financing-provision of shared goods and services. Absent any scheme for fiscal equalization among the disparate regions, there is no assurance that the resource concentration patterns that will emerge reflect overall economic efficiency, quite apart from any equity considerations. And, although the analysis is not as definitive, the weight of evidence seems to me to suggest that, without an equalization scheme, there will be an overconcentration of resources in those regions that embody differential fiscal advantage. Too many resources will be attracted to those regions that contain the relatively larger incomes and wealth.

On this central proposition, my position in 2001 is not different from what it was at mid century. But I now recognize that the practical difficulties, politically, involved in implementing any equalization scheme may be such as to negate any potential net gains. The final judgment here must be pragmatic and must take into account the facts on the ground in particular settings. The case for some sort of equalization is directly related to the size of the predicted disparities among the fiscal capacities of the separate provinces, and also to the size of the provincial budgets, relative both to that of the central government and to the value product of the whole economy. And, of course, the argument for or against any scheme for fiscal equalization must rest on an evaluation of how the political-decision process is observed to work, at both the central and the provincial levels.

Essentially the same evaluation procedure must be adopted when assessing the argument for the continuation or repeal of an equalization scheme that has been institutionalized into the existing structure. The direction of the change in incentives upon elimination of the equalization scheme is clear. The question to be asked is, given the changes in locational resource patterns that will result from the predicted changes in incentives, will taxpayers-beneficiaries, in all regions be made better or worse off?

The debates over fiscal equalization require an evaluation of the effects of interregional or interprovincial resource flows within the national economy and upon the desirability of these effects, whatever these might be. The ultimate evaluation here seems clearly to be related to the policy stance taken with regard to international resource flows. Fiscal equalization aimed, at least in part, at reducing the incentives for migration from the relatively poor regions to the relatively rich regions of the economy may be thwarted or even overwhelmed in effect by national policies toward immigration.

References

Buchanan, James M. "Federalism and Fiscal Equity," *American Economic Review* 40 (September 1950): 583-99.

———— (a). "Federal Grants and Resource Allocation," *Journal of Political Economy* 60 (June 1952): 208-17.

———— (b). "A Reply," *Journal of Political Economy* 60 (December 1952): 536-38.

Buchanan, James M. and Richard E. Wagner. "An Efficiency Basis for Federal Fiscal Equalization," in *The Analysis of Public Output*, ed. Julius Margolis (New York: National Bureau of Economic Research, 1970), 139-58.

Buchanan, James M. and Charles J. Goetz. "Efficiency Limits of Fiscal Mobility," *Journal of Public Economics* 1 (1972): 25-43.

Gordon, H. Scott. "The Economic Theory of a Common-Property Resource: The Fishery," *Journal of Political Economy* 62 (April 1954): 124-42.

Hardin, Garrett. "The Tragedy of the Commons," *Science* 162 (December 13, 1968): 1243-48.

Knight, Frank H. "Some Fallacies in the Interpretation of Social Cost," *Quarterly Journal of Economics* 38 (August 1924): 582-606.

Pigou, A. C. *Wealth and Welfare* (London: Macmillan, 1912).

Samuelson, Paul A. "The Pure Theory of Public Expenditure," *Review of Economics and Statistics* 36 (November 1954): 387-89.

Scott, Anthony D. " Federal Grants and Resource Allocation," *Journal of Political Economy* 60 (December 1952): 534-36.

———— . "The Fishery: The Objectives of Sole Ownership," *Journal of Political Economy* 63 (April 1955): 116-24.

Tiebout, Charles M. "A Pure Theory of Local Expenditures," *Journal of Political Economy* 64 (October 1956): 416-24.