SHOULD CITIES SUBSIDIZE NONPROFIT INTERNATIONAL ORGANIZATIONS? A Case Study and Cost Benefit Analysis

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ABSTRACT: This article examines the contribution to the economic well being of cities made by policies that subsidize nonprofit international organizations (NIOs). The methods used entail a formal cost benefit analysis of Montreal International, a joint venture of the Canadian federal, the Quebec provincial, and the Montreal local governments. The case explores a wide set of theoretical and policy issues. Among those issues are the inability of: 1) economic impact statements to clarify the need for subsidies, 2) intangibles to justify subsidies, and 3) a subsidy policy to generate real growth. The article raises policy questions about the wisdom of subsidizing NIOs.

While most urban development practitioners agree that the provision of local public services, regulations, and zoning are government functions, they are sharply split on how far government programs should expand beyond such activities. One group of development specialists, represented by Porter (1990, 1996), contend that the international competitiveness of the local economy can be enhanced by the formation of industrial clusters based on private, for-profit initiatives and private sector investments. These policy analysts contend that the government's role should be limited to supporting education, promoting private research and development, and improving urban infrastructure. Another group of policy analysts, however, support a more interventionist role of government. According to these policy analysts, development, particularly in the central city, can be brought about by local public capital modeled as a specific factor of production. Development actions can be supported by government subsidies and are often implemented through partnerships with the private sector and public sector brokering and networking (Glasmeier & Harrison, 1996).

As might be expected, the problem of choosing between these approaches generates considerable debate. For instance, critics doubt that the subsidization of urban economic activities such as sports facilities, sporting events, convention centers, and similar economic activities

JOURNAL OF URBAN AFFAIRS, Volume 23, Number 3-4, pages 361–373. Copyright © 2001 Urban Affairs Association All rights of reproduction in any form reserved. ISSN: 0735-2166.

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could pass a strict cost benefit test. This is the opinion of Baade and Dye (1990), Noll and Zimbalist (1997), Kalich (1998), and Siegfried and Zimbalist (2000) concerning sports investments. Similar criticisms have been directed toward "prestige projects" (Loftman & Nevin, 1996). Comparable to a sports and tourism strategy, some cities have subsidized and attracted nonprofit international organizations (NIOs). For the purpose of this article, the NIO unit is either the headquarters or the field office of a nonprofit international organization. With members and activities in at least three countries, administration is its main activity. These NIOs may or may not be affiliated with the United Nations (UN). NIOs, however, are a subset of NGOs (nongovernmental organizations). There are also US foundations with international activities that have characteristics that may qualify them, except for the foreign exchange premium, as NIOs. NIOs can be very large and have the potential to create positive economic impacts if attracted to an urban region.

Many NIOs are attracted to cities through subsidies. In New York City, the United Nations (UN), the diplomatic community, and their foreign employees are exempt from most municipal, state, and federal taxes. Other cities in the US and around the world host and subsidize specialized UN Agencies, e.g., Montreal hosts the International Civil Aviation Organization (ICAO). In the US, there are approximately 600 nonprofit NGOs, mostly small, associated with the UN that can claim some type of tax exemption. About half are located in New York City and Washington, DC, and the remainder are disseminated across the United States.

Because there are similarities between sports facilities and NIOs, there is the possibility that evaluation of the subsidization of NIOs may also be negative. However, inferring this conclusion may be premature because there are, on the benefits side, some aspects of NIOs that differentiate them from sport clubs and similar activities, and thus may save them from the same prognosis. Basically, NIOs not only have a static economic impact like any other economic activity, but some NIOs also have a dynamic impact. The static impact corresponds to the effect of the NIOs' expenditures upon the local economy as measured by an input-output (I-O) model, or an export-based model in the terminology of Hudson (1999). In this approach, the coefficients of the I-O model are not modified by the project.

But some activities have retroactive effects upon the economy: they modify the productivity of local resources, are a "piece of the puzzle" in a development strategy, or are viewed as a contribution to urban renewal. These intangible outcomes are often used to justify projects that cannot pass a strict economic and cost benefit test. These effects are called dynamic effects. This is in addition to any "consumer surplus" as computed by Irani (1997). This article addresses both the tangible and intangible effects of NIOs.

In the case of NIOs, the dynamic effect can take three forms:

NIOs can provide knowledge about foreign situations and markets (Knight, 1995). Acting as intermediaries between local and foreign firms and government organizations, they can decrease some transaction costs permitting local firms to tap into global networks, a positive outcome in view of the globalization of the economy (Kanter, 1995). Here, transaction costs stand for the cost of discovering the existence of foreign markets, the prices and regulations prevailing in these markets, the costs of negotiating and enforcing contracts, and the cost of forecasting the demand in these markets. In international trade, these costs are sometimes prohibitive for small and medium sized firms. Of course, each NIO does not reduce all of these transaction costs. Some NIOs merely provide knowledge, others provide contacts, and still others go as far as acting as intermediaries. But even if not all transaction costs are eliminated, NIOs are still useful, (e.g., the enforcement of contracts is helped by their moral persuasion). In a way, the NIOs can play a

complementary role to local producers. They are thus part of the strategy of development designed to provide an international economic base to local economies. This has a tendency to increase exports of locally manufactured goods, services, and tourism. In turn, this trade provides foreign exchange, which in many countries carries a premium considered an economic benefit.

- 2) The NIOs may promote local research and development or educational activities, which increase the productivity of local production. This changes some coefficients in the I-O model so that the static impact understates the real impact of the NIOs.
- 3) The NIOs may change the image of the city. This change may attract business firms not related to the NIOs.

The purpose of the article is to show that in the pursuit of NIOs, notwithstanding their beneficial dynamic impact, it is possible for cities to suffer from the winner's curse: a situation where the winning bidder in an auction is carried away to the point where he pays a price higher than what the object is really worth. To illustrate the winner's curse, we present hereafter the case of Montreal International which illustrates a wide set of theoretical and policy issues related to the potential benefits derived from subsidizing NIOs.

THE CASE OF MONTREAL INTERNATIONAL

Montreal International is a joint venture of the Canadian federal, the Quebec provincial, and Montreal local governments and of some private firms. The mission of Montreal International is to give an international dimension to the economic structure of Montreal (a metropolitan area with a population of 3.5 million). By 1997, Montreal International attracted and/or subsidized many NIOs. The large majority (53) participated in a survey conducted by a private local firm in 1998 for Montreal International. These NIOs had 1,419 full time employees. The survey data and some computations were later incorporated into a consultant's report (RCGT, 1999). Although the consultant did not conduct the survey, he was mandated to provide advice to Montreal International. The consultant's report shows that in 1997, the NIOs established in Montreal and subsidized by Montreal International spent \$210.8 million in the local economy (RCGT, 1999):

- \$147.7 million on administrative activities (considered to have a static economic impact).
- \$27.5 million on Montreal's outputs bought for exports by NIOs: manufactured goods, consulting services, and educational programs. (This is not unique to Montreal's NIOs. In 1996, for example, the Ford foundation approved a program of \$3 million for New York University for international relations.)
- \$35.6 million on international conventions and meetings in Montreal sponsored by the NIOs established in Montreal (RCGT, 1999).

The last two items constitute the dynamic impact of NIOs in Montreal. Therefore, 30% of the total economic impact of NIOs is imputable to their dynamic activities.

In 1997, the city of Montreal and the federal and provincial governments subsidized the NIOs in the following ways: direct aid (cash payments, free office rent, loaned personnel) totaling \$22.6 million; and tax exemptions on capital and property, tax exemptions on the revenues and consumption expenditures of the foreign employees of the NIOs totaling \$19.0 million (RCGT, 1999). Not all NIOs and their employees benefit from all listed tax exemptions; numerous regulations apply.

Starting from the direct expenditures of NIOs, the consultant (RCGT, 1999) like other US consulting groups (see Siegfried & Zimbalist, 2000) justified the subsidies on the basis of the gross and net economic impacts on regional employment and on the value added at factors' cost. The gross impact covers the direct, indirect, and induced effects of the expenditures and accounts for the multiplier as computed by a regional input-output model. In the case of Montreal, the computations were made by the Bureau de la Statistique du Québec (BSQ). In the United States, the U.S. Commerce Department computes multipliers for various regions. The net impact is obtained by the same type of computations except that it does not include the induced effect and is corrected for the overevaluation produced by the income of immobile labor, the government aids (someone must be taxed to provide the government aid), and the double counting involved in the inclusion of Canadians that attend the conferences organized by NIOs.

The consultants contend that the gross impact amounts to \$290 million of value added and 5,477 jobs; the net impact produces \$184 million of value added and 3,324 jobs. If only the government budget is considered, the net impact model shows an annual fiscal surplus of \$44.9 million (RCGT, 1999). The policy question relates to the accuracy of the consultant's analysis.

THE ECONOMIC THEORY OF SUBSIDY DETERMINATION

Although useful for many purposes, the impact approach in financial terms is not sufficient to justify subsidies because modern economic theory stipulates that only an economic analysis that goes beyond the financial appraisal can provide complete answers to the question. From the economic point of view, the financial analysis is inadequate because the market prices it uses are distorted by taxes, tariffs, imperfect competition, transfer payments, the absence of consumer surplus, and the presence of externalities, etc. (Perkins, 1994). Therefore, the market prices do not represent the real benefits and the true costs of an activity. Neither does the multiplier or ripple effect, which merely identifies the affected sectors without determining whether this effect is real or the result of double counting. Besides Noll and Zimbalist (1997) who qualify the impact methods as bogus, there are plenty of technical demonstrations that show that these methods are inadequate. But to repeat, the multiplier still does not measure increases in city welfare because it does not account for the opportunity cost of the resources used. It also supposes a perfectly elastic supply of factors of production and no excess capacity. At the most it represents virtually zero net effect on output (Siegfried & Zimbalist, 2000). Neither can the justification come from the fiscal impact of a project on the government budget because

the government is not an entity separate from taxpayers, but really the collective expression of the will of taxpayers. The benefits and costs of a government project are then to be defined not as an increase or decrease in government revenues but as a gain or loss in welfare of all members of society (Gramlich, 1981, p. 11).

Montreal International is not alone in doing that. According to the sample of Sullivan and Green (1999), 56% of cities claim to use cost benefit analysis, but in practice these analyses are "not true benefit-cost analyses" (Agostini, Quigley, & Smolensky, 1997, p. 422); they are versions of the bogus method previously mentioned.

Consequently, the only correct way to determine whether an economic impact leads to an increase in city welfare (where an increase in welfare is defined as an increase in the well-being of individuals stemming from an increase in their consumer surplus or an increase in

their rent as owners of factors of production) is to measure benefits and costs in shadow prices. This means using prices that, given the distortions of the economy, reflect real benefits or costs of an economic activity. When used in decision-making, they lead to increases in welfare because "they correct for any divergence between market and economic prices, due to market failure, government intervention, externalities, public goods, consumer and producer surplus and distributional considerations" (Perkins, 1994, p. 110). Here the consumer surplus measures the difference between the amount the consumers are willing to pay for a good or service and what they actually pay for it (Perkins, 1994). It is an economic benefit. Producer surplus or factor rent is also an economic benefit corresponding to the difference between the nominal price and the shadow price (or opportunity cost) of a factor of production. For instance, labor rent is produced when an otherwise unemployed worker is hired. Externalities are goods (or bads) that are not priced by the market but are produced anyway. The value of technological externalities must be taken into account because they are real. On the other hand, transfer payments and credit transactions are not part of the analysis because the gain by one member of society is counterbalanced by the loss of another.

Provided the benefits and costs are correctly established, the maximum amount of the subsidy that can be offered is the difference between the economic value of an activity (i.e., an NIO) and its economic cost of production. If the benefits are net of production costs, as will be the case below for NIOs, the maximum subsidy that can be provided is the net amount of economic benefits. This is premised on the condition that the subsidy is necessary to attract the activity in question.

A COST-BENEFIT ANALYSIS (CBA) OF THE MONTREAL INTERNATIONAL SUBSIDY POLICY

From the net economic impact covering the static and dynamic effects presented by the consultant, we extract or establish in an ad hoc way the economic benefits and costs (in terms of their shadow prices) of the policy.

The Economic Benefits

Ordinarily we expect that the benefits consist of the consumers' surplus, the factors' rent, and the foreign exchange premium. For countries other than the United States, it is useful to compute the foreign exchange rate as it accounts for the fact that the monetary unit of a country may be economically overvalued (or undervalued) due to distortions (tariffs, taxes, subsidies) that influence the market prices in international trade. The shadow price of foreign exchange rate (SER) is equal to the official exchange rate (OER) multiplied by the ratio of the value of trade in domestic prices distorted by taxes and subsidies, over the value of trade in border prices. SER minus one equals the foreign exchange premium. If positive, exports are assumed to be worth more than they appear in domestic prices. Therefore, the premium is the amount by which imports and exports are undervalued in economic terms (Perkins, 1994). The greater the distortion, the greater the premium. The foreign exchange rate does not exclusively benefit the local inhabitants, but also the nation-state as a whole. However, as the federal government is usually an important contributor to the subsidies, the premium becomes a useful piece of information to explain the subsidy.

In addition to the benefits already mentioned, miscellaneous benefits that also translate into consumer surplus and factor rent, peculiar to the dynamic effects of NIOs, must be added. They are composed of an increase in the productivity stemming from research and development expenditures made by NIOs and educational programs financed by them and the value of the image and pride. Figure 1 maps the flows of benefits from their nominal values to their economic values.

Although consumer surplus is a standard component of cost-benefit analysis, it is not a contribution in the case of NIOs because the local population does not consume the NIOs' outputs. This is contrary to sporting and cultural events where the consumer surplus is often enough to transform a losing situation into an efficient one (Irani, 1997, for stadiums; Martin, 1994, for museums). The benefits of NIOs are then limited to the foreign exchange premium, miscellaneous social benefits, and labor rent. Of all the value added produced by the I-O model, only the labor rent is counted as a benefit because it is the only resource that may become unemployed in the long run. Capital is mobile—it moves in the long run if unemployed in a particular region. Although labor is theoretically mobile, it is not so in eastern Canada due to language differences and generous social policies. The fact that NIOs can be assimilated to exports because they bring foreign exchange does not change the method of computing economic benefits. As previously mentioned, these computations consist mainly of labor rent. Besides the foreign exchange premium, the economic benefits of exports do not correspond to

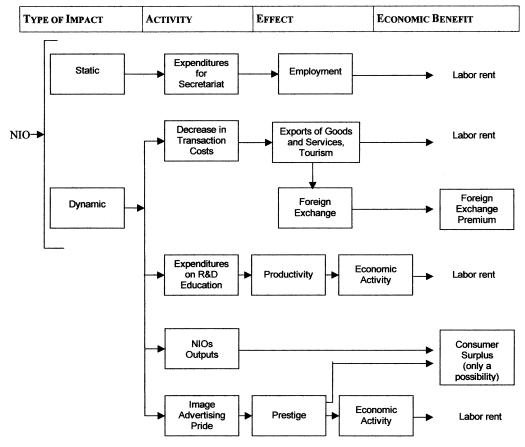


FIGURE 1
Flow of Economic Benefits From NIOs

their business volume, augmented by the multiplier effect, but do correspond to the change in the factor rents they produce. The reason is that the other resources used to produce the exports in question are likely to have opportunity costs. It is only if these resources would be completely unemployed in the absence of NIOs that there is a possibility of engendering a factor rent, an unlikely occurrence.

The Labor Rent

In 1997, the economic benefits from the labor rents derived from the static and dynamic impacts of the NIOs amounted to \$18.251 million. The computation of the labor rent has two component parts. First, the rent coming from the direct labor in the NIOs' static and dynamic impacts. The less qualified labor, working directly for NIOs, corresponds more or less to clerical, maintenance, and other employees in simple functions in the organizations. It is more susceptible to temporary unemployment so society gains when this labor is permanently employed. The gain is the difference between the nominal wage and the shadow price of labor. Here, 34.26% of the nominal wage or the wage bill of this kind of labor is a rent. A rough estimate puts the proportion of these people at 40% of the payroll of the NIOs. This payroll is \$71.804794 million (year 1997). That means that the direct labor rent is (in millions)

$$$71.804794 * .40 * .3426 = $9.8401287$$

The coefficient of 34.26% of the wage bill, representing an increase in labor rent, has been determined according to the following reasoning. The annual shadow wage bill is

$$SWB = PWt + (52 - P)V$$

where:

- P = The number of weeks (during the year) that the worker is expected to be employed without the project.
- V = The value of a week of unemployment. This value is determined by the worker's situation and attitude, i.e., its reservation wage. Its level is, among other things, a function of the level of unemployment insurance benefits (Martin, 1988).
- W_t = The weekly nominal salary plus the fringe benefits, including the employer's contribution. It represents the marginal productivity of labor.

$$SWB/NWB = 0.6574$$

where NWB = annual nominal wage bill.

Thus, 1 - 0.6574 = 0.3426 = the proportion of the nominal wage which is a rent.

P, W₁, and V come from empirical studies (Martin, 1988, 1994) of the Montreal and Quebec economies, and thus apply only to them. However, this figure is still representative of Montreal in 1997 (the reference date of the present study) because of institutional factors dating back to the early 1970s, and peculiar to Quebec, Canada, France, and Germany. These factors constrain the capacity of an economy to create jobs and attain full employment. This state of affairs, which can be defined as voluntary structural unemployment, will continue in the future because recent attempts by the Canadian federal government to reduce the generous unemployment insurance payments have met with stiff opposition. It is a political choice that has not been followed by the United States, and it is one of the factors explaining the difference in the unemployment rate between the two countries.

The second component in the computation of the labor rent is based upon the rent coming from the indirect labor in the NIOs' static and dynamic impacts. The indirect labor consists of employees of suppliers found elsewhere in the Montreal and Quebec economies earning \$56.178 million in salary and wages. (This figure was taken from the input-output simulation used to calculate the net economic impact of the NIOs in Montreal.)

Furthermore, it is also estimated that 43.7% of this labor force has few qualifications, i.e., the workers have a level of education lower than that of a high school diploma (Martin & Martin, 1996). Therefore, these workers are vulnerable to unemployment. By applying the coefficient of labor rent (34.26%) to the vulnerable wage bill, the indirect labor externality is (in millions)

Total labor rent is then

$$$9.8401287 + $8.4107734 = $18.250902$$

The Foreign Exchange Premium

As the source of funds of NIOs is foreign, and because their dynamic effect generates exports, the NIOs also produced a foreign exchange premium worth \$6.324 million in economic terms. The foreign exchange premium is thus computed in Table 1.

Miscellaneous Benefits

In the category of benefits produced by dynamic effects there is also an increase in productivity stemming from research and development expenditures made by NIOs and educational programs financed by them. The survey identified a few NIOs that were aware the prototypes they ordered from local manufacturers eventually became the basis for exports (besides the original orders of the NIOs). But due to the rules of confidentiality, the resulting trade cannot be evaluated precisely. It is, however, reputed to be very small. As for education projects financed by NIOs, two local universities have set up programs financed by NIOs, but their local effects are almost nil because the students were foreigners and returned to their home countries after graduation.

TABLE 1

Computation of Foreign Exchange Premium (in millions)

Expenditures of NIOs in Montreal	147.7
Exports of manufactured goods and services	27.5
Exports in tourism (conventions and meetings)	35.6
Gross Exports	210.8
Less imports to produce exports (25% of exports)	52.7
Net Exports	158.1
4% foreign exchange premium	6.324

Source. Transurb (1995).

Other possible sources of miscellaneous benefits produced by a dynamic impact of NIOs include the value of the city image and pride. The concept of image needs a few remarks. First, the overall image is the weighted sum of particular images (wealth, information infrastructure, education, arts, technology, crime, congestion, pollution, etc.) so the result is not always positive. However, a good image reduces transaction costs by facilitating contacts. This article investigates the effectiveness of NIOs in building the image of Montreal. The pertinent definition of the image is the ability to attract economic activities (firms) that are not related to the image-maker. The condition that the attracted firms not be related to the image-maker was set by Baade and Dye (1990). Note that not all attractants are image-makers. For instance, ICAO attracted other aviation related organizations to Montreal over the years. However, this is not a case of image. Rather, it is the formation of a cluster where the attracting force is the agglomeration economies.

We have already taken into consideration the direct effects (if any) of the image by accounting for the volume and foreign exchange rate of exports (goods, services and tourism) stemming from the reduction in transaction costs provided by the NIOs. As to the other diffuse effects, there is nothing or practically nothing of value there, as was found in sports empirical studies (Baade & Dye, 1988; Noll & Zimbalist, 1997). In any case, Hudson (1999), while studying the performance of cities, set the proper condition to observe the effect of the image—a period of 20 years. This is a period long enough for the effect to become known. But, it turned out that there was nothing to show (Hudson, 1999). There is no empirical evidence to back up the claim that image matters (Siegfried & Zimbalist, 2000).

This applies to NIOs. Indeed, many cities that are the home of NIOs do not consider them as a location factor. For instance, New York City, which capitalizes upon its international character by calling itself the "Capital of the World," does not mention NIOs or even the UN in its main promotional material directed at influencing the location of businesses. It's the same with the promotional material of Montreal, which at the time did not mention the presence of ICAO, IATA, etc. More than that, the presence of numerous NIOs and NGOs is not something about which to boast because this may reduce the attraction power of a city since the arrival of taxexempt NIOs eventually raises the tax bill of other businesses. This has been the experience of New York City with respect to the social services sector (Kamen & Malanga, 1994). That explains why many cities do not have active policies to attract NGOs, especially the small ones, because once these NGOs obtain a tax-exempt status from the Internal Revenue Service, under section 501(c)(3), they can claim some tax exemptions from state and local governments. Not only are economists reluctant to assign a value to the image produced by NIOs, but they are also not swayed by the advertising value of the international exposure that a particular city gets through the presence of its NIOs. Indeed, with the globalization of the economy, large cities become automatically "international" because their banks, manufacturing firms, research centers and universities are likely to be part of international networks. So, when they are subsidized (and not all of them are), it is not for their international status, but because they ameliorate the local human capital, introduce new technologies, etc. In other words, when they are subsidized, it is to the extent that they produce dynamic effects. There is no reason why the NIOs' treatment should be different. What is missing is a clear measure of the willingness to pay for such advertising, as is obtained when advertising space is bought within the constraint of a fixed advertising budget. This is what would happen if the beneficiaries of the advertising effects of NIOs would tax themselves to make sure that the activity in question was located in their city.

Finally, there is the value of pride. Empirical studies have shown that people who do not use the facility may nevertheless recognize that it has a non-use value (called existence value). That means that they are sometimes willing to pay taxes to subsidize activities that bring pride (a type of non-use value) to the city, e.g., the case of museums (Martin, 1994). However, the valuation of such a benefit is best made through the contingent valuation approach. A questionnaire that does not focus on assigning a monetary value to pride is consequently not sufficient. For instance Swindell and Rosentraub (1998) were successful in ranking pride visavis other variables to determine the best type of taxes to subsidize sporting events, but they did not assign monetary values to pride itself. But to obtain a worthwhile valuation with this method, the activity must be well known and appreciated by the general population, which is not the case of the NIOs in Montreal.

In summary, the survey of NIOs in Montreal has shown that although many of them have a potential to produce a dynamic impact, the results are modest. The dynamic impact combined with the static impact of the NIOs produced \$24.575 million of net economic benefits. This amount was allocated among labor rents, the foreign exchange premium, and a minute amount of social benefits embodied in exports stemming from prototypes ordered by NIOs (for which we have no hard data). This amount represents the maximum subsidy that could be provided to the NIOs on economic grounds.

The Economic Costs of Subsidizing NIOs

Montreal International subsidizes NIOs directly and through tax exemptions. But that's only part of the economic cost of the aid, because somehow this aid must be financed by taxation or by rationing public goods and services and this costs more in economic terms than the nominal monetary cost. Note that taxation and rationing eventually translate into a reduction in consumer surplus for individuals. This reduction is the measure of their opportunity cost or reduction in welfare.

For the direct aid financed by taxation, the economic cost is higher than the monetary cost because taxation produces distortions in the economy. So that the economic cost of a subsidy is the marginal cost of public funds plus the cost of the distortion produced by taxation (Devarajan, Squire, & Suthiwart-Naruefut, 1997). Harberger (1997) suggests 20% as the applicable surcharge.

Tax exemptions may also have an economic cost different from their monetary cost. This is calculated under two working hypotheses.

Hypothesis No. 1: The government taxes to finance tax exemptions. In this case the budget of the government, except for the portion (30%) used for the redistribution of income, is a function of the size of the population. Only 70% of the tax bill constitutes an opportunity cost for the use of resources because roughly 30% of federal and provincial taxes are used for the redistribution of income. Consequently, when NIOs bring in foreigners to live in the host city, more government public services must be provided (at least in the long-run). That requires resources. Furthermore, contrary to the US situation, Canadian health and education services are almost free to residents, Canadians and non-Canadians alike. A modest contribution may sometimes be required from foreigners. It's the same for many other public services. They are more numerous in Canada because 40.9% of its Gross National Expenditures is in the form of public expenditures while the proportion is only 29.9% for the US. It is through the taxation of local residents that the resources are transferred from the locals to the foreigners. The economic cost equals the tax minus the redistribution component plus the distortion costs of taxation. As NIOs are not consulates or embassies, the reciprocity clause between countries does not apply. Consequently, the tax exemptions of the governments of Canada and of the Province of Quebec are not compensated.

Hypothesis No. 2: The government does not increase taxes. Resources needed to support the foreigners are then obtained by canceling discretionary government projects or rationing other public goods. That also reduces welfare. The economic cost of canceling projects is then the value of cancelled projects or of the rationed public services. Table 2 summarizes economic costs of the aid to NIOs.

The computation yields

Direct aid: 22.6 * 1.20 = \$27.12

Tax exemptions: Hypothesis #1: 19 * .70 * 1.20 = \$15.96

Hypothesis #2: 19 * 1.0 = \$19.00

The total economic cost of governments' subsidies is consequently \$43.08 million or \$46.12 million.

THE RESULT

Because the economic benefits are \$24.575 million, plus the minute amount stemming from exports mentioned before, and the economic costs of the aid are either \$43.1 million or \$46.1 million (provided that the year 1997 is representative), it is a case of oversubsidization. Apparently, this is what also happens in sports facilities in the US (Siegfried & Zimbalist, 2000), and it is also what happened in the recent location of automobile assembly plants in the US where it seems that the residents would have been better off without the plant given the size of the subsidy (Bogart, 1998).

CONCLUSION

From the point of view of optimum allocation of resources, the oversubsidization of international organizations, at least in the case of Montreal, is significant. As in the case of sports

TABLE 2

Economic Costs of Aid to NIOs

Туре	Mode of Financing	Economic Cost Amount of the Tax Exemption
Direct Aid		
Cash	Individual	
Free Office Rent	Income and	Taxes * 1.20 ^a
Loaned Personnel	Corporation taxes	
Tax Exemptions		
On Property	Hypothesis #1:	Taxes * 0.7 ^b * 1.20 ^a
On Persons:	Taxes	
Income	Hypothesis #2:	Amount of tax exemption
Consumption Expenditures	Cancelled	
	Government projects or rationing	

Note. Strictly speaking, the total cost of subsidies is higher than that amount because the operating costs of Montreal International, the organization that administers the aid program, are not included.

^aThe distortion cost of taxation is \$0.20 per \$1.00 of tax.

^bThe proportion of the tax bill devoted to the redistribution of income is 30%.

facilities, the question is then why does Montreal International continue to provide subsidies? Because the local residents do not enjoy a consumer surplus and are not asked to participate in referendums in this matter, the answer lies in the interventionist philosophy of the various governments involved compounded by misguided "economic impact statements" (Siegfried & Zimbalist, 2000, p. 110, in the case of sports facilities). The problem is further complicated by the illusion that tax exemptions are costless and the lack of success in attracting NIOs that have a large dynamic impact on the local economy.

When the competition for NIOs is within one country, the option is regulation by a higher level of government, or a conference of mayors. However, for NIOs, the competition is international, thus eliminating this set of options. Consequently, the only viable option for the moment is selectivity in the pursuit of NIOs. This is achieved by making cost-benefit analyses in economic terms to at least identify the NIOs that lower the welfare of local residents. So the primary policy option for local leaders is to not stop trying to attract NIOs, but to refrain from subsidizing those with little potential to enhance local economic activities.

REFERENCES

- Agostini, S. J., Quigley, J. M., & Smolensky, E. (1997). Stickball in San Francisco. In R. G. Noll & A. Zimbalist (Eds.), *Sports, jobs and taxes*. Washington, DC: Brookings Institution Press.
- Baade, R. A., & Dye, R. F. (1988). An analysis of the economic rationale for public subsidization of sports stadiums. *Annals of Regional Science*, 22, 37–47.
- Baade, R. A., & Dye, R. F. (1990). The impact of stadiums and professional sports on metropolitan area development. *Growth and change*, 21(2), 1–14.
- Bogart, W. T. (1998). The economics of cities and suburbs. Upper Sadde River: Prentice Hall NJ.
- Devarajan, S., Squire, L., & Suthiwart-Naruefut, S. (1997). Beyond rate of return: Reorienting project appraisal. *World Bank Research Observer*, 12(1), 35–46.
- Glasmeier, A. K., & Harrison, B. (1996). Public-sector presence essential to inner-city survival. CUPReport, 7(2), 5–6.
- Gramlich, E. M. (1981). Benefit-cost analysis of government programs. Englewood Cliffs, NJ: Prentice-Hall. Harberger, A. C. (1997). New frontiers in project evaluation: A comment on Devarajan, Squire and Suthiwart-Naruefut. World Bank Research Observer, 12(1), 73–79.
- Hudson, I. (1999). Bright lights, big city: Do professional sports teams increase employment? *Journal of Urban Affairs*, 21(4), 397–408.
- Irani, D. (1997). Public subsidies to stadiums: Do the costs outweigh the benefits? *Public Finance Review*, 25(2), 238–253.
- Kalich, V. Z. (1998). A public choice perspective on the subsidization of private industry: A case study of three cities and three stadiums. *Journal of Urban Affairs*, 20(2), 199–219.
- Kamen, R., & Malanga, S. (1994). Nonprofits: New York's New Tammany Hall. *Crain's New York Business*, Part 1, 48–51, 53, October 31; Part 2, 47–51, November 7.
- Kanter, R. M. (1995). Thriving locally in the global economy. *Harvard Business Review*, 151–160, September–October.
- Knight, R. V. (1995). Knowledge-based development: Policy and planning implications for cities. Urban Studies, 32(2), 225–260.
- Loftman, P., & Nevin, B. (1996). Going for growth: Prestige projects in three British cities. *Urban Studies*, *33*(6), 991–1019.
- Martin, F. (1988). The Influence of Unemployment Insurance Benefits Upon the Social Cost of Labour in Lagging Regions. In B. Higgins & D. J. Savoie (Eds.), *Regional Economic Development* (pp. 244–269). Boston: Unwin Hyman.
- Martin, F. (1994). Determining the size of museum subsidies. *Journal of Cultural Economics*, 18, 225–270. Martin, F., & Martin, R. (1996). *Harmonization of Canada-United States metropolitan area data with reference to the Montreal metropolitan region*. City of Montreal.

- Noll, R. G., & Zimbalist, A. (1997). (Eds.). Sports, jobs and taxes. Brookings Institution Press: Washington, DC.
- Perkins, F. (1994). Practical cost benefit analysis. Australia, Melbourne: MacMillan Education.
- Porter, M. (1990). The comparative advantage of nations. New York, NY: Free Press.
- Porter, M. (1996). The competitive advantage of the inner city. CUPReport, 7(2), 4, 6.
- Raymond Chabot Grant Thornton (RCGT). (1999). The economic impact of international organizations in Montreal. Montreal: Author.
- Siegfried, J., & Zimbalist, A. (2000). The economics of sports facilities and their communities. Journal of Economic Perspectives, 14(3), 95–114.
- Sullivan, D. M., & Green, G. P. (1999). Business subsidies and municipal controls. Journal of Urban Affairs, 21(4), 267-280.
- Swindell, D., & Rosentraub, M. S. (1998). Who benefits from the presence of professional sports teams? The implications of public funding of stadiums and arenas. Public Administration Review, 58(1), 11-20.
- Transurb, Inc. (1999). Quebec-Ontario high-speed rail project: A cost-benefit analysis. Montreal: Author.