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FEDERAL GRANTS UNDER THE DISCIPLINE OF GLOBAL FORCES

MICHEL BOUCHER
JEAN-LUC MIGUÉ

Equalization: Welfare Trap or Helping Hand? (PAPER #2)

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Section 1
Federalism and domestic free trade

The economic forces underlying the federalist process within traditional federal states rest on the fact that the burden of provincial policies cannot be transferred to outside producers and consumers. The prices of goods, capital and labour are determined outside provincial economies. It follows that the free movement of resources increases the burden of inefficient provincial policies. Provincial interventions are made more costly to local residents because of the high supply elasticity characteristic of open economies. Because they can easily move away from unfavourable provincial legislation, resource owners are more sensitive to relative tax and regulatory actions of provincial administrations. Imposing significantly heavier taxes and stricter regulations on productive provincial resources increases local production costs and under free trade within the Canadian economic union first causes a more rapid and more pronounced substitution of imported goods and services for local production. Second, insofar as the burden of these measures is more keenly felt by capital and labour suppliers, victims of abuse can move their capital to neighbouring jurisdictions and at the limit "vote with their feet" and leave the province. Because inefficient decisions by provinces impose a heavier burden on their own residents, the predicted outcome is less interventionism by the provinces.

Resources, not governments, are mobile

Note that under present-day federalism, decentralized authorities do not acquire mobility in the manner of private capital in search of higher returns. Under existing arrangements, provincial governments are prevented from competing for the favours of voters in the supply of services outside their territory. The Quebec government does not directly compete with the Ontario government for the supply, say, of a labour relations legal framework, or of education services in Ontario, because each province possesses a geographic monopoly enforced by state coercion. Only a higher, central authority, such as the federal government, has the power to compete with lower-level authorities. But the end-result is not essentially different. As Nobel Laureate James Buchanan reminds us, competitive federalism is "simply the extension of the market economy to the organization of the political structure", and "the foremost contribution of federalist structures is to minimise political coercion in society and thereby to promote the advancement of human liberty" (Buchanan, 1995: 260).

Confusion on the concept of federalism

Paradoxically, in the conventional debate in Canada and in Europe, federalism is associated with the strengthening of the central government's powers, while the search for autonomy and decentralization is linked to narrow secessionist movements and anti-European options. Supporters of devolution are immediately labelled anti-Europe "nation-builders" and, in Canada, "province-builders". Yet the contrary is true. Federalism is decentralization. As a form of government, federalism is the opposite, not of decentralization, but of the unitary state. The supporters of devolution are the real federalists.

Federalism and public choice

Rather than seek to influence government directly, economic agents will choose the administrative location in which to place their assets. The exit mechanism under federalist structures is, therefore, superimposed on politics as a constraint on decentralized authorities. In the pursuit of their welfare, individuals act in their capacity as asset owners rather than as voters in their attempt to maximize value. In that respect, the exit process works in conjunction with the voice process, but is to be distinguished from it. Only indirectly is the analysis of federalism related to the public choice tradition.

Section 2
Equalization and shared cost programs as impediments to federalism

Centralization is not simply the taking over of a public service by the central authority. In concrete terms, centralization takes the form of tax harmonization, of equalization grants or cost sharing with provincial or local governments, as well as, of central regulation and regional policies. Economics provides a strict theoretical measure of the concept of over centralization, which is analytically synonymous with balkanization. It is the extent by which a public intervention disassociates the price or tax burden of provincial goods and services from their production cost, thus impeding the movement of resources to their most productive location. Inasmuch as prices are determined at the common-market level, outside the provincial territory, only central intervention acting over the whole Canadian market can do that. Only it can shift the burden of a policy to non-provincial victims. And the distortions are no less real when prices of publicly supplied goods and services, such as education or health services, rather than market prices, such as agricultural products, are distorted. Official budgetary statements do not reveal this reality.

Direct impact on economic agents

As a mechanism to redistribute wealth between regions, equalization and cost sharing programmes have long-term effects which can be described as tragic. Under a system that does away with regional responsibility, the output distribution is made more uniform across regions. Instead of reflecting regional demand and cost conditions, as a true federal system should, the tax price is increased (through uniform proportional and progressive taxation) in upper-income regions and lowered in low-income areas. This is a phenomenon known in economics as price discrimination. In circumstances examined here, the practice of discrimination by the central monopoly takes place between regions rather than between different consumers of a given industry. Common-market policies that transfer wealth among provinces reduce the concern that economic agents would otherwise have to make necessary adjustments. Consumers and producers are discouraged from settling in those areas where their productivity is highest, because they are able, without moving, to take advantage of the handouts granted them by the central authority. Far from doing away with national disparities, policies with strong regional redistributive effects amplify them, by discouraging resources from moving to their most productive location.

Impact on provincial governments

Payments to provincial governments by the central government foster resistance to necessary adjustments in a second way. By releasing member provinces from the consequences of their decisions, central subsidies and regulations encourage member governments to show little concern for adopting adjustment policies themselves. Equalization payments, cost-sharing arrangements and central regulatory measures mostly serve to shield decentralized administrations from the consequences of their bad policies. The more inefficient they are, the more they are compensated by the central authority. This system is an economic absurdity.

Section 3
Equalization and cost sharing as an instrument of political cartel

The conditions that must prevail in an industry for the emergence of collusion and its persistence over time have been thoroughly discussed: First of all, a limited number of firms or a high degree of concentration is conducive to collusion. Secondly, the colluding firms must make sure that no particular firm is able to violate the agreement by secretly selling to some important clients to gain larger profits. Thirdly, the related price structure depends on the existence of barriers to entry and a low price elasticity of the demand for goods or services. The best strategy to make sure that a hypothetical conspiracy is effective and successful, so that its members do not practice secret price-cutting, and enforcement efforts are cost minimising, consists in fixing market shares.[1] Fourthly, the number of clients and their buying characteristics play an important role in the propensity to collude.[2] Fifthly, conditions favourable to collusion do not guarantee its long-term survival because incentives are always strong at the margin for each of the conspirators to violate the agreement.

Translating the previous argument to a federation structure would run as follows: Canadian politicians, at their respective level of government, are viewed as entrepreneurs who seek to maximize their joint probability of re-election. The Canadian federal structure, formed by ten provinces, is more conducive to collusion than the United States, a country composed of 50 states. Secondly, obstacles to collusion for politicians are far less important that those encountered by potential conspirators in the market. Thirdly, there are no legal barriers that prohibit or impede politicians from negotiating together and from providing rents or privileges to their relevant pressure groups. Fourthly, provincial politicians possess an absolute advantage over potential conspirators in a market, in that they have their own respective territory or respective market share. Although this is a necessary condition for forming a cartel, it is not a sufficient one. The sufficient condition allowing a political cartel to endure over time comes from the federal government being able and willing to put in place an enforcement mechanism that will induce provinces to adhere and to cooperate. Equalization payments and other grants-in-aid are such instruments used by the federal government to keep and maintain the loyalty of each participant in the political cartel.

[1] G. J. Stigler (1968). « Fixing market shares is probably the most efficient of all methods of combating secret price reductions ». p. 42.

[2] R. A. Posner (1976). « Ease of detection is directly related to the concentration of the selling side and inversely related to the concentration of the buying side ». p. 53.

Empirical tests of the political collusion hypothesis

In their book, *"The Power to Tax"*, written in 1980, Brennan and Buchanan raise the possibility that in a federal structure, federal politicians can collude with state or provincial politicians to reduce competition in the political process. In 1994, Grossman and West tested this political collusion hypothesis for Canada over the period 1958-1987. They conclude (1994: 21) "our empirical research reveals evidence for Canada that is at least consistent with the Brennan and Buchanan monopoly government hypothesis".

Grossman and West proceed with their empirical test by defining a measure of collusion among governments as the share of federal grants-in-aid in total provincial and local government receipts. They do the empirical analysis, developed by Oates (1985), in two steps. First, a statistical test allows them to conclude that the rise in the crucial ratio of federal grants-in-aid to total provincial and local government receipts leads to growth in the share of all three levels of government relative to GDP. This empirical result is a first indication that the collusion hypothesis has some validity. The second test directly shows that intergovernmental grants to lower levels not only increase the budget of the beneficiary governments, but also increase the own-purpose expenditures of the contributing government. Political cartelisation implies that the size of all government budgets in the GDP increases. Each level of government gains power from being a member of the cartel. Grossman and West introduce this second test to rule out the decentralization hypothesis that is implicit in the first statistical test. Only the political collusion hypothesis can explain that the federal government increases its own-purpose expenditures when giving grants-in-aid to provinces. In other words, the first test is a necessary condition whereas the second is a sufficient one. The net result is that the discipline of competitive federalism is impeded.

Section 4
Federalism and international free trade

The logic of federalism operates in any political structure where the power of political authorities extends to less than the size of the economy in which resource movement is unimpeded by trade barriers. Its competitive action can be at work within national economies in decentralized federal states or between countries associated in common-market arrangements with limited central powers. The determining characteristic of a federalist structure is that most responsibilities are entrusted to decentralized authorities, who have no power to tax or regulate the whole area where trade is free. Such arrangements enhance the ability of resource owners to move their goods, their capital or themselves from detrimental tax and regulatory measures. As a competitive arrangement, freer trade places national governments in the approximate position of a province or a state or a canton vis-à-vis the national economy in a federal state (Migué, 1993).

Free market analysts have done a good job of popularizing the notion that free trade raises the living standards of the masses. What is less evident in public debates is a second, no less far-reaching contribution of freer trade, namely its role in minimising political coercion in society and promoting the advancement of human liberty. In an extension of the federalist principles to international conditions after free trade, more focus should be placed on the role of resource mobility as constraints on domestic public choice. The government of a national economy with free inward and outward movement of factors and goods, has less power to engage in purely redistributive policies. In countries of the European Union and of North America after NAFTA, residents can more easily escape the burden of monopoly governments either by purchasing their supply outside their own country or by moving their assets or their person to neighbouring countries offering more favourable legislations.

Trade accords, social policy and national sovereignty

Free trade across nations and the attendant mobility of resources that ensues in no way threatens the formal sovereignty of national states or the formal power of provinces in matters of social policies. Economic forces set in motion by free trade are the real source of influence in containing government powers. The virtue of free trade is to transfer control over wealth from governments to individuals.

SECTION 5
EQUALIZATION AND COST SHARING AFTER FREE TRADE, EMPIRICAL EVIDENCE

The main objective of this paper is to show the long run consequences of trade liberalization on equalization payments, on the Canada Health and Social Transfer programmes (CHST), and the resulting impact on Canadian government budgets in general, as well as on each level of government. With the implementation of the Canada-US Free Trade Agreement in 1989 and the North American Free Trade Agreement (NAFTA) in 1994, the overall economic context has changed a great deal. When competition on international markets increases, the consequences on Canadian political collusion can be compared with those observed on producers experiencing the erosion of their cartel.

As a general rule, international competitive forces increase the deadweight losses of redistribution policies relative to the political benefits received by pressure groups. This consequence is similar to that encountered by a cartel when new firms enter its market. The cartel's monopolistic profits are reduced. Political collusion loses its potency for the federal government - the enforcer, as well as, for the provinces - the partners. An increase in resource mobility, caused by the reduction in trade barriers, threatens their joint probability of re-election. Politicians cannot fail to adjust to this new situation. Our general proposition to be empirically tested is thus: Competitive forces external to the Canadian market affect the stability of the political cartel.

Our argument is based on the emergence of a new influence arising from the Free Trade Agreement (FTA) in 1989 and the North American Free Trade Agreement (NAFTA) in 1994. This additional source of competition introduces important changes in the Canadian market with repercussions on the public finances of all Canadian jurisdictions. Here is a brief scenario of how international competition exerts its influence on Canadian governments: First, grants-in-aids from the federal government to other jurisdictions decline. Then lower-level governments react to these new incentives by cutting programmes whose marginal political benefits are insufficient or low relative to their social marginal costs. Finally, intensive international competition leads to a decline in the relative share of government own-purpose expenditures in the Canadian GDP.

Our work focuses on the important role played by these two successive trade agreements. A specific variable is introduced to take into account their overall influence. Both the federal and provincial governments find that higher resource mobility increases the excess burden of their redistribution policies relative to their political benefits. So the expected value of the variable should be negative and signifi-

cantly different from zero. Increasing competition from abroad results in the gradual erosion of the political cartel created by Canadian governments. On the one hand, the federal government derives fewer and fewer benefits from contributing to the stability of the cartel by its equalization payments and its conditional grants. Provincial governments, for their part, realize that the benefits generated by their respective participation in the cartel are also eroded. All parties to the political cartel become increasingly conscious that it is in their own interest to move away from the collusive arrangement to secure their political survival. The ultimate consequence is a gradual decrease in the relative importance of each level of governments in the GDP.

To test the hypothesis that a more open economy destabilizes political collusion requires two sets of equations. The first set, composed of six equations, contains the following.

$$FGORV_t = A_0 + A_1\ DEC_t + A_2\ TGRT_t + A_3\ OFTA + Y_t \qquad (1.1)$$

$$FGORV_t = A_0 + A_1\ DEC_t + A_2\ TGRT_t + A_3\ OFTA + A_4\ X_t + Y_t \qquad (1.2)$$

$$PGORV_t = B_0 + B_1\ DEC_t + B_2\ TGRT_t + B_3\ OFTA + V_t \qquad (2.1)$$

$$PGORV_t = B_0 + B_1\ DEC_t + B_2\ TGRT_t + B_3\ OFTA + B_4\ X_t + V_t \qquad (2.2)$$

$$LGORV_t = C_0 + C_1\ DEC_t + C_2\ TGRT_t + C_3\ OFTA + U_t \qquad (3.1)$$

$$LGORVt = C_0 + C_1\ DECt + C_2\ TGRTt + C_3\ OFTA + C_4\ X_t + U_t \qquad (3.2)$$

The first dependent variable $FGORV_t$ is defined as the relative share of federal government own-purpose expenditures on the GDP in time t; the second $PGORV_t$ defines provincial government own-purpose expenditures as a share of GDP in time t and the last one $LGORV_t$ is the ratio of local government own-purpose expenditures on the GDP in time t. The main independent variables are respectively DEC_t, the percentage of provincial and local own-purpose expenditures on total government expenditures in time t; $TGRT_t$, the measure of political collusion, defined as federal grants-in-aid as a share of total provincial and local government receipts in time t. X_t is a composite of different variables in time t that attempt to control for other influences exerted on the size of the public sector. They are CDI_t, per capita disposable income, that controls for the influence of the Wagner's law; POP_t, population, that acts as a scale variable and $Time_t$, a trend variable, that can catch a relevant external influence (Marlow, 1988). Finally, the variable $OFTA_t$, the competitive effect of the two trade agreements, is measured by the ratio of exports to GDP. The remaining variables, Y_t, V_t, U_t, are random error terms for each of the equations.

Table 1 displays estimates of all equations both with and without control variables for the period 1981-1999.[3] The first column presents all the independent variables included in each of the two specifications, the first focusing exclusively on the main components underlying the rise of a political cartel and the second including some general environment variables. The three other columns show the respective estimated coefficients obtained for a given level of government by each specification. The numbers in parentheses below the estimated coefficients are the absolute values of the t-statistic. The standard measure of goodness of fit is the adjusted R^2_a and the Durbin-Watson test indicates that two equations without control variables are subject to serial correlation. They are adjusted for first-order serial correlation using the Cochrane-Orcutt technique as shown by the coefficient Rho.

TABLE 1

The effects of external competition on the political collusion for each level of Canadian government, 1981-1999

Governments	**Federal**		**Provincial**		**Local**	
Equations / Variables	(1.1)	(1.2)	(2.1)	(2.2)	(3.1)	(3.2)
CONSTANT	31.994 (1.72)	-24.485 (0.92)	-16.81 (0.86)	-60.50 (1.95)	-29.39 (3.20)*	-54.10 (4.20)*
DEC	-0.223 (0.79)	-1.167 (4.04)*	0.606 (2.04)	-0.516 (1.54)	0.583 (4.26)*	-0.103 (0.74)
TGRT	0.242 (1.30)	0.667 (5.51)*	0.280 (1.43)	0.750 (5.34)*	0.252 (2.56)*	0.343 (5.88)*
CDI	-	-0.0022 (3.76)*	-	-0.0024 (3.56)*	-	-0.001 (3.50)*
POP	-	0.0054 (4.19)*	-	0.0054 (3.61)*	-	0.0031 (5.05)*
TIME	-	0.191 (0.37)	-	0.448 (0.76)	-	-0.196 (0.795)
OFTA	-0.139 (2.18)*	-0.479 (4.64)*	-0.165 (2.46)*	-0.556 (4.64)*	-0.056 (1.95)	-0.197 (3.95)*
R^2_a	0.457	0.891	0.273	0.859	0.482	0.841
D.-W.	1.414	1.262	1.333	1.347	1.13	1.326
Rho	0.721		0.714			

Notes. The absolute values of the Student's t-statistics are in parentheses. An asterisk indicates that the estimated coefficients are significant at the five-percent level.

[3] Statistics Canada has recently introduced major changes in the national account tables, mainly in the public sector side. It is now impossible to compare and replicate the work done by Grossman and West as relevant time series data are only available from 1981 to 1999.

Empirical results

The first group of equations shows that the OFTA variable is negative in each of the equations as expected. Its coefficients are significant at the five-percent level for federal and provincial governments, but only for one local government equation. Overall it is seen that the federal government reduces its share of own-purpose expenditures in the GDP by a percentage between 0.139 and 0.479 for each percent increase of exports in the GDP, whereas provinces decrease the ratio of their own-purpose expenditures on the GDP by a percentage slightly higher, between 0.165 and 0.556. This difference seems normal, as provinces are more open economies than the country as a whole. The decline experienced by local governments in the share of own-purpose expenditures in the GDP is relatively lower, between 0.056 and 0.197, although it is only statistically significant at the five-percent level in the equation having control variables. This last result tentatively suggests that local authorities merely react to adjustments made by provincial governments.

When these coefficients are converted into real percentages of government own-purpose expenditures in the GDP, it is found that the federal government reduces its shares of own-purpose expenditures in the GDP by some 2.8 to 3.5 percentage points, whereas the provinces decrease the ratio of their own-purpose expenditures in the GDP by a percentage varying from 3.4 to 4.7. Local governments register a decline in their share of own-purpose expenditures in the GDP around 1.4 percentage points, although it is only statistically significant at the five-percent level for one equation. As for the decline observed in the share of federal and provincial own-purpose expenditures in the GDP, it is spread over the last eight years.[4]

From an analytical point of view, the breakdown of political collusion, as measured by the declining share of federal grants-in-aid in total provincial and local receipts, implies that the relative importance of own-purpose expenditures on the GDP by each level of government now grows more slowly than under a cartelised political regime.

At the same time, the “have” provinces are not immune to the impact of freer trade. Alberta and Ontario have proceeded with important reductions in their personal income tax. These provincial initiatives enhance the erosion of the cartel. The federal government is no longer in a position to discipline the political cartel, so that some Canadian provinces dare to cheat by more closely linking the tax price of their public services to the standard marginal cost of taxation. These provinces behave in a manner analogous to firms involved in a cartel and seeking to cheat at the margin to increase their profits. On the other hand, the recipient provinces adjust more slowly to the new conditions, presumably because they are partially immunized against freer trade by federal grants.

[4] This means that it took many years for Canadian firms to change their traditional trade patterns from East-West to North-South and to adjust to new opportunities arising from the 1989 Free Trade Agreement. The recession of the beginning of the decade can also be responsible for the low turnaround.

A second component of our empirical research considers the own-purpose expenditures by all governments as a share of GDP in time t as additional evidence of the influence of outside competition on the erosion of the Canadian political cartel. To do so, we use an approach developed by Marlow (1988).

The two following equations are specified:

$$TGORV_t = D_0 + D_1\ DEC_t + D_2\ TGRT_t + D_3\ OFTA + W_t \qquad (4.1)$$

$$TGORV_t = D_0 + D_1\ DEC_t + D_2\ TGRT_t + D_3\ OFTA + D_4\ Xt + W_t \qquad (4.2)$$

They contain the same independent variables as previously used. However, the dependent variable $TGORV_t$ is now defined as the overall own-purpose government expenditures as a share of GDP in time t. The random disturbance term is W_t. Table 2 shows parameter estimates, as well as, their level of significance. Also included, are the standard measure of goodness of fit and the Durbin-Watson test for serial correlation.

Again, the results reveal the influence of exogenous competition on the behaviour of the three governments taken as a whole. In both equations, the estimated coefficient of the OFTA variable is significant at the five-percent level and their respective value corresponds to the sum of estimates previously shown in Table 1.

When converting these two coefficients into real percentages of total government own-purpose expenditures in the GDP, all Canadian governments decrease their relative share in the GDP by some 7.7 to 9.4 percentage points.

TABLE 2

The effects of external competition on the overall size of governments, 1981-1999

Equations	**4.1**	**4.2**
CONSTANT	10.119 (0.212)	-139.073 (2.01)
DEC	0.603 (0.835)	-1.786 (2.386)*
TGRT	0.659 (1.384)	1.760 (5.61)*
CDI	-	-0.0057 (3.70)*
POP	-	0.0139 (4.17)*
Time	-	0.443 (0.335)
OFTA	-0.369 (2.24)*	-1.231 (2.647)*
R^2_a	0.261	0.847
D.-W.	1.413	1.226
Rho	0.729	-

Notes. The absolute values of the Student's t-statistics are in parentheses. An asterisk indicates that estimated coefficients are significant at the five-percent level.

Section 6
Conclusion

Our three main empirical results support the hypothesis that the suppression of trade barriers tend to erode the Canadian political cartel underlying grants to provinces: First, the respective share of each level of government own-purpose expenditures in the GDP decreases. The same is true of the total share of government own-purpose expenditures in the Canadian federation. This is consistent with the view that federal payments programs sterilise the cost of inefficient policies for the recipient provincial governments. Federal payments transfer the burden of provincial inefficient policies to residents of contributing provinces. A third result confirms that recipient provinces adjust to this new competitive situation more slowly than the "have" provinces.

On the whole, as competition from abroad intensifies, the federal budget serves less as an instrument to enforce the political cartel, and more as a means to provide for the needs of their own federal administration. On the other hand, and in contrast with conditions prior to the free trade agreements, increases in provincial budgets serves more as a substitute for federal expenditures and less as an expression of the power of the cartel.

Competition to date remains the most powerful force against the expansion of Canadian government budgets. It induces governments to reduce their redistributive policies now more expensive relative to their expected political benefits. This empirical work shows that competition seriously affects some political initiatives that are prejudicial to citizens in a federation.

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