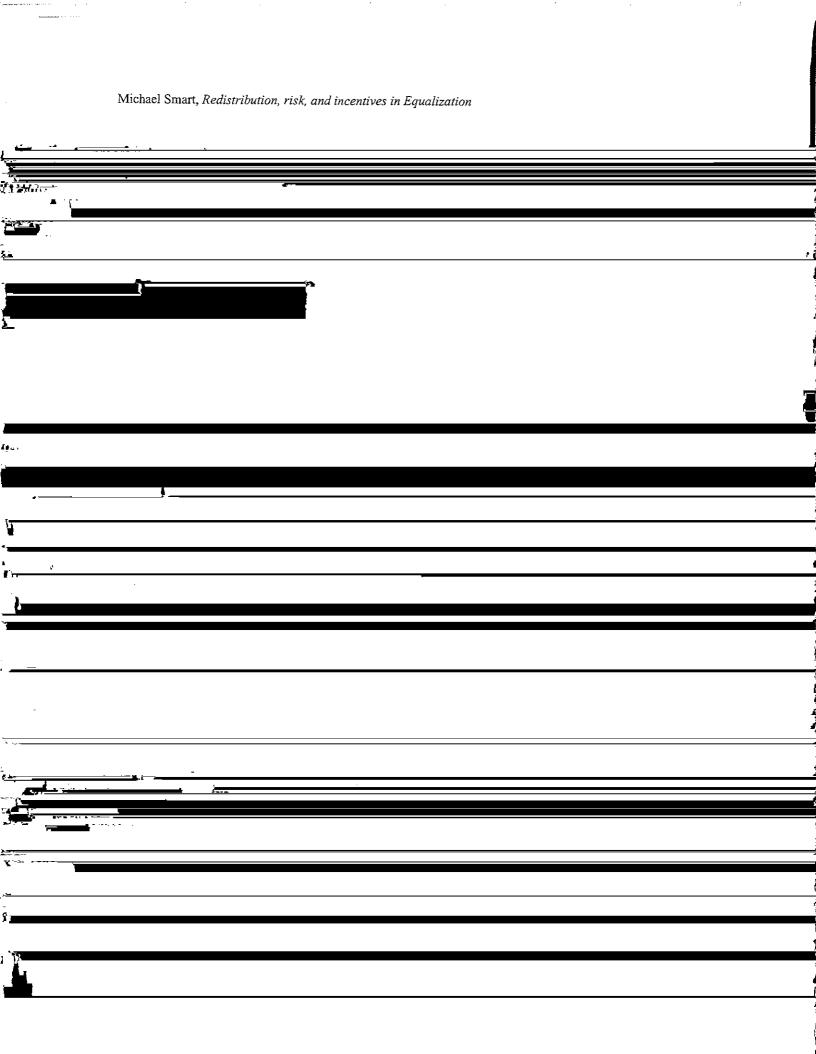
REDISTRIBUTION, RISK, AND INCENTIVES IN EQUALIZATION: A COMPARISON OF RTS AND MACRO APPROACHES*

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1 INTRODUCTION

Equalization is sometimes called the "glue" that holds the Canadian federation together. Perhaps, but those bonds have been loosening in recent levied the average of all provinces' tax rates. Increasingly, it appears that the common critiques of Equalization relate to the mechanics of the RTS approach, and the incremental reforms of previous years may no longer be



 $\label{thm:michael Smart} \mbox{Michael Smart}, \mbox{Redistribution, risk, and incentives in Equalization}$ deficiency relative to the standard level in the

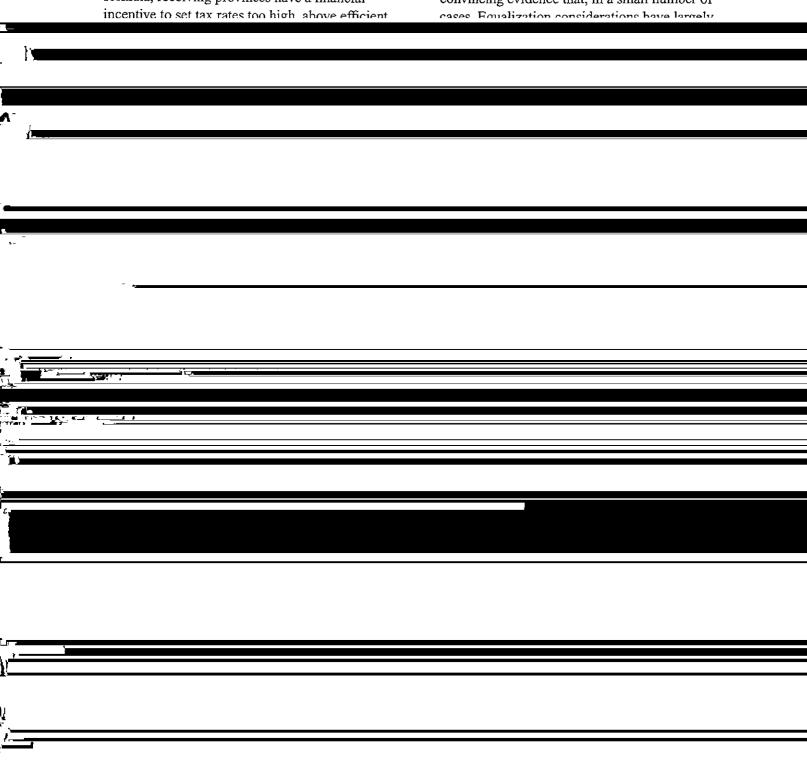
Michael Smart, Redistribution, risk, and incentives in Equalization policies. It is sometimes suggested that entitlements. If the province is not in the non-transparency is desirable, in that it standard (the obvious example is the offshore oil sublimates political conflict and negotiation over categories), the problem is extreme: since the the cire of interconsummental tomafant

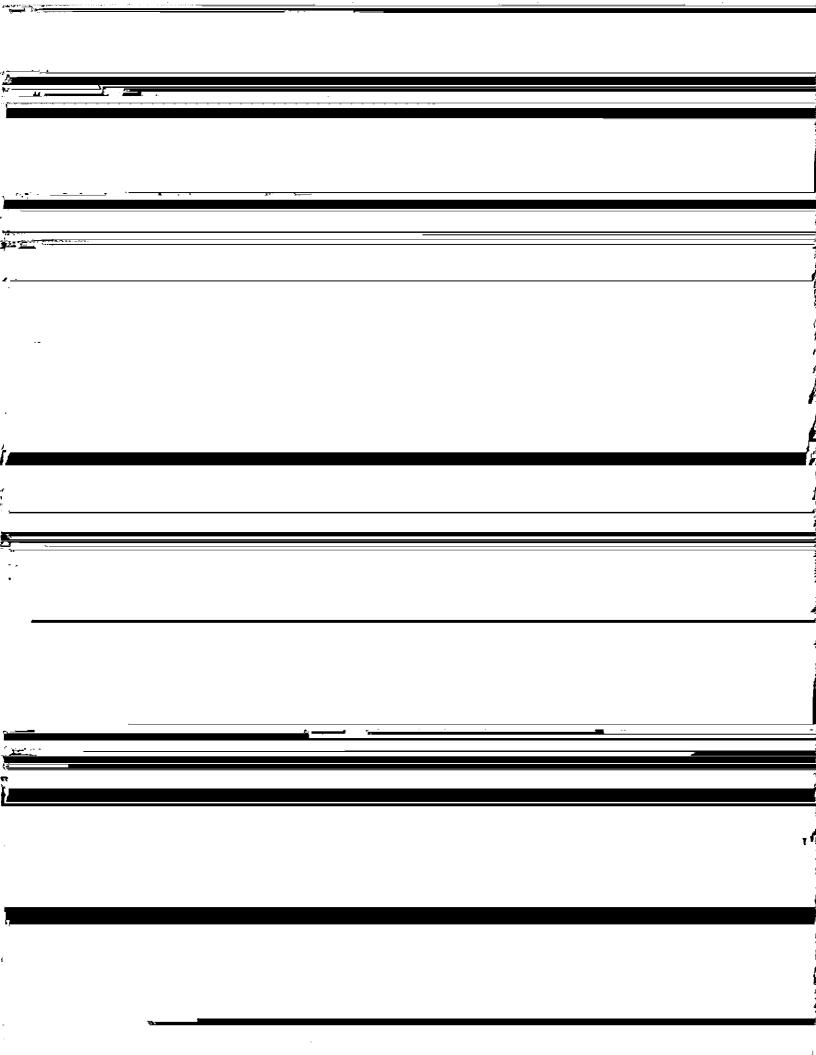
create a "cycle of dependency" for receiving governments. He proposed that the generic solution of partial equalization be extended to all bases to deal with the disincentive problem.

Smart (1998) argues that the adverse incentive effects of Equalization are even more extensive and potentially harmful. Under an RTS formula, receiving provinces have a financial incentive to set tax rates too high above efficient

Jackson, 2001). This is consistent with the notion that Equalization insulates receiving provinces from the pressures of tax competition and so allows them to set higher rates.⁴ However, the evidence is quite indirect, and more work on this is needed.

Less formally, there is anecdotal but convincing evidence that, in a small number of cases. Equalization considerations have largely





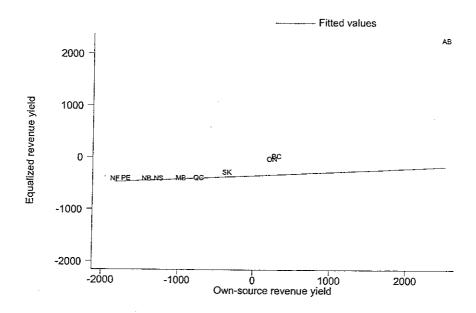
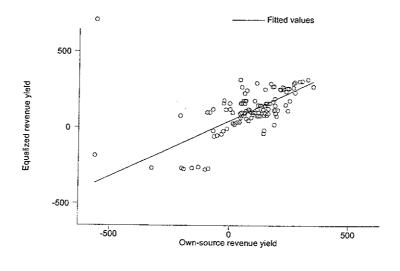


Figure 1: The redistribution function of equalization

indicating the exclusion of the three non-receiving provinces from the formula significantly reduces the average degree of tedistribution among the provinces. The coarse

The stabilization function. While Equalization was conceived of and operates primarily for redistribution to have-not provinces, it also plays

 $\label{thm:michael Smart} \mbox{Michael Smart}, \mbox{Redistribution, risk, and incentives in Equalization}$ Table 2: Transfers and stabilization Michael Smart, Redistribution, risk, and incentives in Equalization



3 TOWARDS A MACRO FORMULA FOR EQUALIZATION

Based on these considerations, it may be that the time has come to consider a fundamental change in the structure of Equalization in Canada Many

Notice that the current system calculates the entitlement for each revenue source in exactly this way, where the deficiency variable is the level of tax base and the scale factor is the national average tax rate. In what follows we

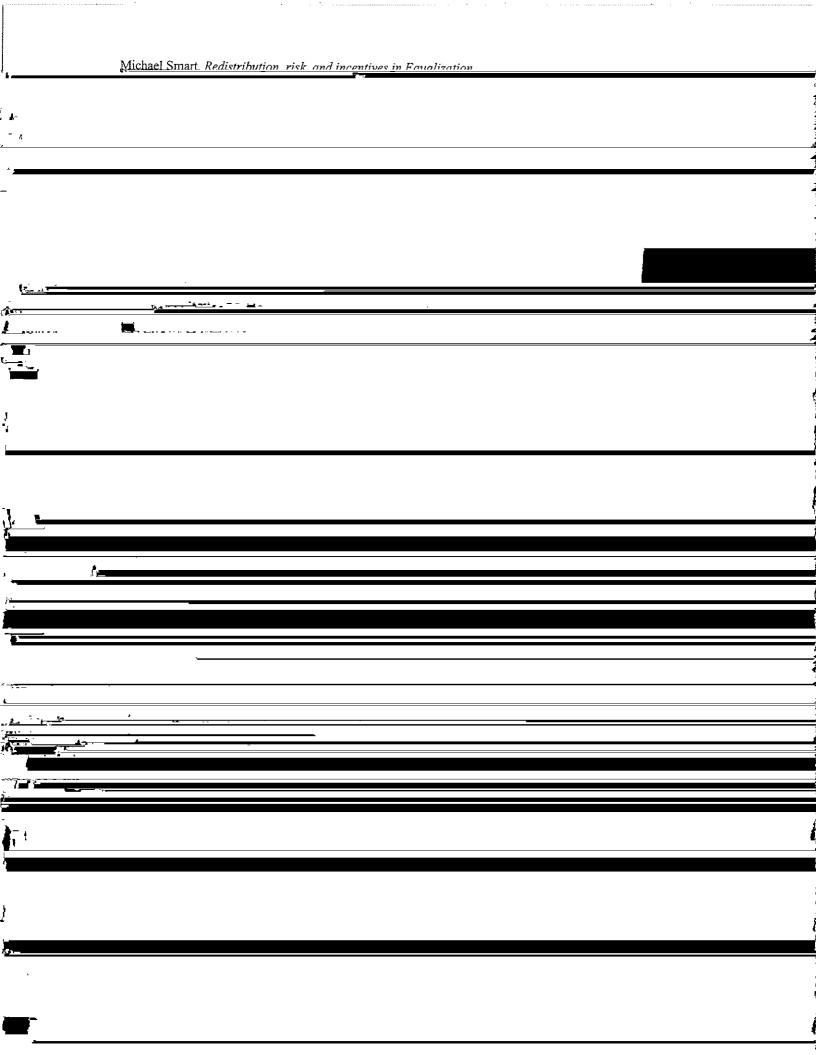
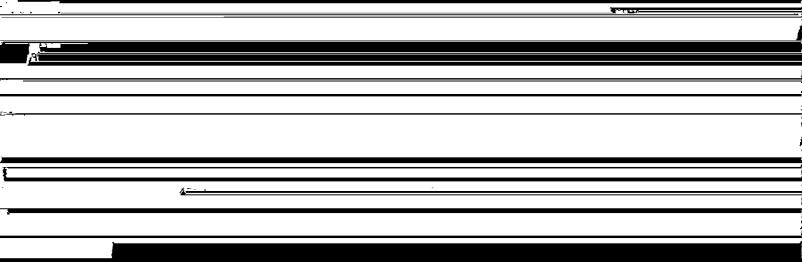


Table 3: Alternative transfer formulas

	Income Formula	Revenue Sharing Formula	Stabilization Formula
Scale Factor	-0.175	-0.970	-0.115
Average shortfall in simulated	ı		
transfers (\$ per capita):			
Newfoundland	6	-6	586
Prince Edward Island	-6	-12	533
Nova Scotia	-61	-70	348
New Brunswick	42	37	469
Quebec	54	51	245
Manitoba	266	260	464
Saskatchewan	-116	-117	42
Standard deviation of change			
in net revenues (\$ per capita)	172	177	149

Notes: "Income formula" refers to the transfer system that is proportional to differences in GDP per

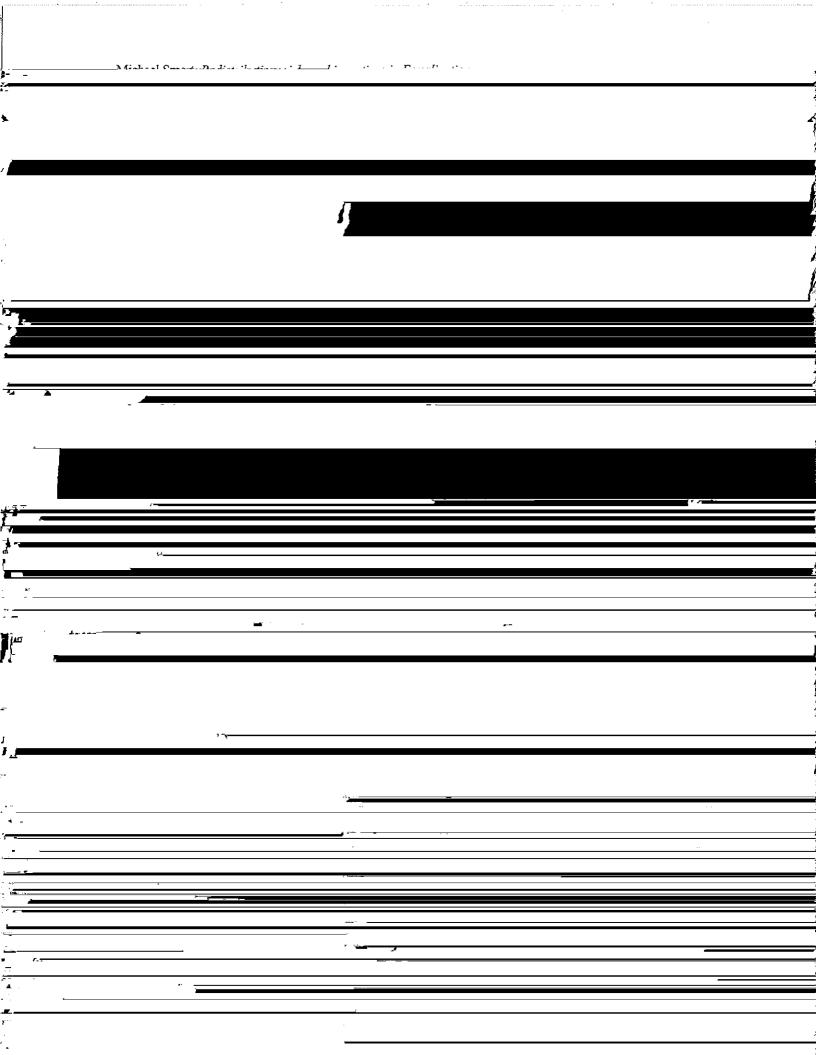


Michael Smart, Redistribution, risk, and incentives in Equalization Actual Simulated 2000 1500 Equalization per capita 1000 500

Table 4: Percentage distribution of equalization entitlements, 1980-99

	Tax base:				
		Business	Sales	Property	Resource
Province	PIT	taxes	taxes	taxes	taxes
Newfoundland	36.4	10.7	10.1	21.1	1.5
PEI	35.2	11.2	9.8	18.7	8.2
Nova Scotia	32.3	15.0	5.5	21.5	10.2
New Brunswick	36.9	11.4	8.6	22.4	2.8
Quebec	38.5	2.5	11.9	18.9	8.3
Manitoba	37.2	16.2	11.4	13.3	6.1
Saskatchewan	80.5	25.3	10.7	21.9	-62.9

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Michael Smart, Redistribution, risk, and incentives in Equalization the federal government, which pays Equalization is replaced by national GDP Y_t , and the scale factransfers to recipients in Canada's "gross" system tor is adjusted accordingly. of equalization, rather than non-recipients, as in a

