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Notes and Comments

Fiscal Redistribution in a Fragile Federation: Moscow and the Regions in 1994

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Despite mass privatization and market reforms in Russia, the central state continues to redistribute considerable amounts of money between the country's eighty-nine regions. About 4.3 per cent of gross domestic product (GDP) – or 31 per cent of federal tax revenues – was transferred back to the budgets of the regions in 1994.[1] The average region recovered about 45 per cent of the taxes it remitted to the centre in different kinds of budget transfers, up from 37 per cent in 1993.[2] But this understates the true scale of redistribution. In addition, many federal spending programmes, while not explicitly targeted at particular regions, had a geographically concentrated impact.

Understanding the basis of this redistribution is important for several reasons. First, future rates of growth and productivity will depend on whether such transfers are channelling capital to more efficient and pro-reform constituencies or are softening budget constraints and protecting loss-making enterprises and industrial sectors. Secondly, such redistribution has important implications for state stability. Since 1990, more than a third of Russia's provinces have declared sovereignty, demanded greater autonomy, unilaterally reduced tax payments to the centre or demanded control over natural resources and export rights. The war in Chechnya is the most disastrous example of where such conflicts can lead. In almost all these disputes, fiscal transfers have been a key focus of contestation.[3]

A previous study analysed the pattern created by fiscal flows to and from Russia's regions in 1992.[4] This documented a highly politicized logic of redistribution, in which

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[1] This includes 'indirect' transfers due to revisions of the proportion of tax the regions were permitted to keep from those proportions voted in the federal budget. Russia's 4.3 per cent compares to grants to state governments of 0.7 per cent of GDP in Austria (1992), 2.5 per cent in the United States (1992), 3.6 per cent in Germany (1992), and 3.9 per cent in Canada (1991) (calculated from OECD, *Revenue Statistics of OECD Member Countries: 1965–1994* (Paris: OECD, 1995)).

[2] Aleksei Lavrov, 'Rossiiskiy Byudzhetny Federalizm: Pervie Shagi, Pervie Itogi', *Segodnya*, 104 (7 June 1995), p. 5.

[3] See Christine I. Wallich, ed., *Russia and the Challenge of Fiscal Federalism* (Washington, DC: The World Bank, 1994); Leonid Smirnyagin, 'Politichesky Federalizm protiv ekonomicheskogo', *Segodnya*, 28 (25 June 1993), p. 2; Oksana Dmitrieva, 'Political Games Round the Budget', *Moskovskie Novosti*, 28 (1993); Steven L. Solnick, 'The Political Economy of Russian Federalism: Problems of Measurement and Analysis' (unpublished paper, Columbia University, New York, 1995); Daniel Treisman, 'After the Deluge: The Politics of Regional Crisis in Post-Soviet Russia' (unpublished, Department of Political Science, UCLA, 1996).

[4] Daniel Treisman, 'The Politics of Intergovernmental Transfers in Post-Soviet Russia', *British Journal of Political Science*, 26 (1996), 299–335.

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a region's receipts of net transfers from the centre was a function of protest actions by the region – sovereignty declarations, strikes and anti-Yeltsin voting. The most assertively discontented and mobilized regions received larger benefits than their more docile – though arguably more 'needy' or 'deserving' – neighbours. Despite declared aims of both assisting regions with greater socio-economic needs and supporting those most committed to implementing market reform, Moscow's policy tended at best to ignore such factors and at worst actually to discriminate *against* such regions.

This Note presents a similar analysis of the underlying logic of central fiscal redistribution in Russia in 1994. Since 1992 was the first, chaotic year of Russia's radical economic reform and independent statehood, one might expect the political logic to have changed since. Moreover, in 1994 the Russian government introduced a rationalized system of budget aid to regions, specifically designed to bring order to the seemingly haphazard and idiosyncratic process. A Fund for Financial Support of the Subjects of the Federation, financed by part of central value added tax receipts, was set up to make redistributive allocations to those regions classified as 'needy' or 'especially needy' on the basis of published criteria (which began operating in the second quarter of 1994). And an effort was made to bring previously unbudgeted subsidized credits (issued by the Central Bank) onto the budget and to reduce the discretionary issuing of export privileges to specific regions.[5]

Did Russia's fiscal reforms succeed in depoliticizing the central allocation of benefits? Or has the same process of lobbying by threat of disruption and central appeasement of the politically discontented continued? This is the question this Note addresses.

RUSSIAN INTERGOVERNMENTAL FINANCE IN 1994

In 1994, the three main categories of budget transfers from the centre to the regions were payments from the Regional Support Fund, net mutual payments and short-term budget loans.[6] Together, transfers from these three sources totalled 27 trillion roubles, or 4.3 per cent of GDP.[7] Of this 27 trillion roubles, 23.8 trillion constituted actual transfers of funds to the regional budgets ('direct transfers'), while the other 3.4 trillion accrued to the regions in the form of permission to retain a higher proportion of local value added tax than originally budgeted ('indirect transfers').[8]

Of the three main transfers, net mutual payments were the largest (16.2 trillion roubles, or 2.6 per cent of GDP). These were made to compensate regions for additional costs caused by central government or parliament decisions and to fund certain federal programmes in the regions (mostly investment in social infrastructure and support for agriculture).[9] Short-term loans were the smallest, accounting for only 200 billion roubles.

[5] Export quotas on all goods except oil and oil products were eliminated by decree as of 1 July 1994 (see IMF, *Economic Reviews: Russian Federation*, No. 16 (Washington, DC: IMF, 1994), p. 223). On Central Bank credits, see IMF, *Economic Reviews: Russian Federation*, chap. 4.

[6] See Lavrov, 'Rossiiskiy Byudzhetny Federalizm'; and Aleksei Lavrov, *Problemy Stanovleniya i Razvitiya Byudzhetnogo Federalizma v Rossii* (Moscow: Analytical Administration of the President of the RF, September 1995).

[7] See Lavrov, 'Rossiiskiy Byudzhetny Federalizm' and *Problemy Stanovleniya i Razvitiya Byudzhetnogo Federalizma v Rossii*. The data contained in these articles were obtained from the Ministry of Finance and the State Tax Service. The GDP proportions assume an estimated 1994 GDP of 630 trillion roubles.

[8] These and most subsequent figures are calculated from regionally broken-down data provided to the author by Aleksei Lavrov, and collected initially from the Ministry of Finance and the State Tax Service.

[9] Lavrov, *Problemy Stanovleniya i Razvitiya Byudzhetnogo Federalizma v Rossii*, p. 8.

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The Regional Support Fund (RSF), which largely replaced subventions, was the main innovation in the institutions of Russian fiscal federalism.[10] Financed by 22 per cent of the value added tax (VAT) collected in the second to fourth quarters, it was supposed to total 11.9 trillion roubles.[11] But since the collection of VAT fell short of forecasts, about 60 per cent of actual payments under the Fund were in fact made in the form of permission to the regions to keep a larger proportion of VAT collected on their territory. As a result, 2.25 trillion roubles were 'direct transfers' from the centre to the regions made by the Fund, while 3.44 trillion roubles of the Regional Fund transfers were made in the form of increased shares of VAT revenue.

Regions were classified as 'needy', and so received transfers from the Fund, if in 1993 their per capita budget revenues had been less than 95 per cent of the average for all regions of Russia. 'Especially needy' regions, which also received subsidies from the Fund according to a different formula, were those which in 1993 had had per capita regional budget expenditures greater than the average per capita regional budget revenues for all regions – i.e., even after transfers were paid to 'needy' regions, they still could not finance their established level of local government spending.

These criteria suffered from several defects. The formula for 'needy' regions did not for the most part take into account vast differences between the regions in needs associated with geographical location and transport costs, climate, demographic characteristics and level of socio-economic development.[12] It also encouraged regional governments to conceal revenues by routing them through off-budget funds and commercial organizations, and rewarded poor tax collection. That for 'especially needy' regions created incentives to overspend, since central subsidies increased with regional expenditures. For instance, in 1994 the republic of Kabardino-Balkaria reportedly treated 24 per cent of its population to free public transport.[13] And there was no regulation or control over how regional governments used transfers from the Fund.[14]

A large – and increasing – proportion of Russia's regions qualified for support under these criteria. In 1994, sixty-four of the eighty-nine regions received transfers from the Fund, and by 1995 the number had risen to seventy-eight.[15] The number of 'especially needy' regions more than doubled in 1995, from twenty-three to fifty-three.[16] But whatever the defects of the formulae, even they were not strictly observed. Lavrov suggests that, at least in some cases, they were not implemented.[17]

Data accounting for various other regionally concentrated central spending programmes are unfortunately not available. But figures were published in the budget for certain additional allocations to cities made by the Ministry of Atomic Energy and the Defence Ministry (totalling 583 billion roubles). Meanwhile, the rates at which different regions remitted tax revenues to the centre continued to vary widely. While

[10] Subventions, grants from the central budget to the regions, had been used previously to fund regional budget deficits.

[11] Lavrov, *Problemy Stanovleniya i Razvitiya Byudzhetnogo Federalizma v Rossii*, p. 8; Russian Federation Federal Budget, 1994 (Moscow: Russian Federation Government, 1994).

[12] A. D. Barsky and E. V. Detneva, 'Byudzhetny Federalizm', *EKO*, 2, No. 7 (1995), 3–11; Lavrov, *Problemy Stanovleniya i Razvitiya Byudzhetnogo Federalizma v Rossii*.

[13] Aleksei Lavrov, 'Problemy i Perspektivi Razvitiya Mezhbyudzhetnykh Otnoshenii v Rossii', *Obshchestvo i Ekonomika*, 3 (1995), 3–23, p. 18.

[14] Lavrov, *Problemy Stanovleniya i Razvitiya Byudzhetnogo Federalizma v Rossii*.

[15] Lavrov, *Problemy Stanovleniya i Razvitiya Byudzhetnogo Federalizma v Rossii*.

[16] Lavrov, *Problemy Stanovleniya i Razvitiya Byudzhetnogo Federalizma v Rossii*, p. 10.

[17] Lavrov, 'Problemy i Perspektivi Razvitiya Mezhbyudzhetnykh Otnoshenii v Rossii', p. 10; see also Barsky and Detneva, *'Byudzhetny Federalizm'*, p. 7.

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TABLE 1 *Centre-to-Region Budget Transfers in Russia, 1992–94*

	1992		1993		1994	
	bn r.	%GDP	trn r.	%GDP	trn r.	%GDP
Direct transfers from federal budget, total	259.9	1.5	5.4	3.3	23.8	3.8
Subventions or payments from support fund	142.5	0.8	1.1	0.7	7.4†	1.2
Net mutual payments	100.1	0.6	4.2	2.6	16.2	2.6
Short-term loans	17.3	0.2	0.08	0.0	0.2	0.0
Indirect transfers by increasing region's share of VAT	na	na	2.7	1.7	3.4	0.5
Total direct and indirect transfers*	na	na	8.1	5.0	27	4.3
Memo: GDP	18,000		162		630	

Sources: Calculated from data provided to author by Aleksei Lavrov (obtained from Finance Ministry and State Tax Service); 1992 data from Lev Freinkman and Stepan Titov, 'The Transformation of the Regional Fiscal System in Russia: The Case of Yaroslavl', Internal Discussion Paper IDP-143 (Washington, DC: The World Bank, 1994); and Philippe Le Houerou, *Fiscal Management in the Russian Federation*, 14862-RU (Washington, DC: World Bank, 1995).

*These figures do not include the following budgeted expenditures which may have regional implications (actual spending may differ from the budgeted figures): payments from the president's and government's contingency funds (in 1994, budgeted at 49.8 bn and 412.2 bn respectively); financial support to the northern territories (6.5 trn roubles budgeted in 1994); susidies to the budgets of Ministry of Defence and Ministry of Atomic Energy closed administrative-territorial formations (583.2 bn roubles budgeted in 1994); agricultural subsidies. They do include a subvention to the City of Moscow of 2.6 trn roubles in 1994. In addition, they do not include subsidized credits issued by the Central Bank, with or without the government's co-operation.

†Of this, 2.2 trillion was direct payments from the Support Fund, 2.6 trillion was a subvention to Moscow, and 2.5 trillion was payments for social protection made in the first quarter of 1994 and later ratified in the budget.

the Republic of Sakha remitted no regional taxes to the centre, Tverskaya and Yaroslavskaya Oblasts sent 48 per cent to Moscow.[18] The proportion of value added tax retained by the regions in the second to fourth quarters of 1994 ranged from 100 per cent (in Chechnya, Sakha and Chukotka) to just 15 per cent in St Petersburg.[19] The system of budget transfers remained practically the same in 1995, though in the 1995 budget many export and import privileges of individual regions were abolished.[20] The main categories of budget transfers for 1992–94 are shown in Table 1.

[18] Lavrov, 'Rossiiskiy Byudzhetny Federalizm: Pervie Shagi, Pervie Itogi'.
[19] Lavrov, 'Problemy i Perspektivi Razvitiya Mezhbyudzhetnykh Otnoshenii v Rossii'.
[20] Lavrov, *Problemy Stanovleniya i Razvitiya Byudzhetnogo Federalizma v Rossii*, pp. 10–11.

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TABLE 2 *Explaining Fiscal Redistribution in Russia, 1994*†

	(1)	(2)
Need and Ability to Pay		
Social infrastructure more developed	24.54	
	(22.80)	
Classified in federal budget	− 39.94	
budget as 'needy'	(61.63)	
Classified in federal budget	175.31*	346.98***
as 'especially needy'	(68.36)	(84.19)
Profits per capita, 1993	− 2,184.29***	− 2,756.68***
	(363.91)	(483.34)
Electoral Interests of Central Policy Makers		
Vote for Russia's Choice,	− 14.53**	− 21.35**
December 1993	(4.96)	(6.38)
Region had representative	44.62	
on Budget Commission	(35.94)	
Chairman (or deputy) of Budget	− 60.22	
Commission from region	(91.27)	
Chairman (or deputy) of	− 3.37	
parliament is from region	(87.48)	
Representatives per	19.68	71.82***
capita in state Duma	(15.08)	(16.51)
Other Central Objectives		
Advanced pace of	24.33	
economic reform	(25.10)	
Agricultural output	− 0.52	− 1.17*
per capita 1993	(0.40)	(0.50)
Region's share in RF	4.47	
output of raw materials	(6.26)	
Region's tax	− 35.15	− 81.34
collection effort	(51.20)	(72.92)
Institutional Access		
Yeltsin visited	20.83	
region in 1994	(45.25)	
Chernomyrdin visited	108.95	173.43*
region in 1994	(54.46)	(82.48)
Region had permanent	22.66	
representative in Moscow	(40.55)	
Bargaining Power of Region		
Population	− 0.04*	− 0.06*
	(0.02)	(0.03)
Estimated regional output	0.46***	0.75***
(Ind. + Ag. + Services) per capita	(0.09)	(0.11)
Republic status	60.94	
	(61.38)	
Man-days lost	− 0.49	
to strikes, 1993	(1.73)	
Region's governor publicly	98.81	118.72
opposed Yeltsin, September 1993	(50.62)	(67.19)
Constant	425.54**	484.41**
	(151.09)	(163.38)
R^2	0.821	0.770
Adjusted R^2	0.744	0.735
N	70	76

Notes: The regresssor is the net centre-to-region budget transfers, Russia 1994, in 1,000 roubles per capita; the figure given is OLS regression coefficient; standard errors in parentheses; *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$. For notes on construction of indicators, see Appendix.

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TABLE 3 *Explaining Centre-to-Region Transfers and Regional Tax Share in Russia, 1994*

			Federal budget transfers to the regions									
	Region's share of tax revenue		Total		Subsidies paid to region in 1st quarter		Direct transfers from RSF in 2nd–4th quarters		Total transfers from RSF including added reductions from VAT remissions		Net mutual payments	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Need and Ability to Pay												
Social infrastructure more developed	−0.64 (0.98)		43.37 (23.87)	54.93* (20.83)	5.70 (3.75)	6.65* (2.76)	3.18 (3.58)		11.51 (6.69)	9.76 (5.04)	33.74 (19.70)	55.08*** (15.42)
Classified in federal budget as 'needy'	4.17 (2.64)	3.92* (1.87)	−55.31 (66.44)		−7.41 (10.14)		−9.11 (9.68)		23.30 (18.09)		−73.68 (53.24)	−84.94* (40.51)
Classified in federal budget as 'especially needy'	2.63 (2.93)		169.19* (70.69)	203.97*** (54.40)	49.41*** (11.24)	51.50*** (7.82)	35.95** (10.74)	45.47*** (9.52)	69.69** (20.07)	64.73*** (14.06)	124.93* (59.06)	146.62** (43.07)
Profits per capita, 1993	−39.42* (15.57)	−38.25*** (11.04)	−2,048.79*** (375.56)	−1,926.73*** (270.39)	−148.29* (59.85)	−110.86** (35.94)	−172.93** (57.19)	−127.61*** (34.79)	−272.39* (106.82)	−288.73*** (65.54)	−1,696.77*** (314.39)	−1,462.58*** (230.60)
Electoral Interests of Central Policy Makers												
Vote for Russia's Choice, December 1993	−0.11 (0.21)		−13.55** (4.97)	−12.28** (3.92)	−1.74* (0.82)	−1.79** (0.52)	−1.83* (0.78)	−1.21* (0.59)	−2.88 (1.45)	−2.96** (0.94)	−10.71* (4.28)	−7.37* (2.98)
Region had representative on Budget Commission	3.18* (1.54)	3.63** (1.25)	−1.24 (37.02)		5.08 (5.91)		4.82 (5.65)		3.27 (10.55)		−5.13 (31.05)	
Chairman (or deputy) of Budget Commission from region	−3.23 (3.91)		−75.38 (91.74)		−6.29 (15.01)		2.63 (14.34)		−9.57 (26.79)		−54.03 (78.85)	
Chairman (or deputy) of parliament from region	−1.35 (3.74)		−0.01 (88.42)		−20.25 (14.39)		−16.75 (13.75)		−35.83 (25.68)		16.97 (75.58)	
Representatives per capita in state Duma	0.04 (0.65)		34.72* (15.13)	20.36 (10.80)	0.74 (2.48)		1.96 (2.37)		−0.15 (4.43)		16.12 (13.03)	

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Other Central Objectives												
Advanced pace of economic reform	−0.16 (1.07)		20.96 (25.20)		1.54 (4.13)		3.90 (3.95)		−1.14 (7.37)		16.52 (21.69)	
Agricultural output per capita 1993	−0.01 (0.02)		−1.18** (0.41)	−0.60 (0.31)	−0.08 (0.07)		−0.06 (0.06)		−0.17 (0.12)		−0.75* (0.35)	
Region's share in RF output of raw materials	0.02 (0.27)		−6.32 (6.29)		1.03 (1.03)		1.25 (0.98)	1.58 (0.86)	0.29 (1.84)		−5.34 (5.41)	
Tax collection effort	−1.85 (2.19)	−2.46 (1.59)	−5.81 (53.57)	74.34 (41.83)	1.10 (8.42)		4.67 (8.05)	14.12 (7.68)	0.94 (15.03)		−1.53 (44.23)	
Institutional Access												
Yeltsin visited region in 1994	−1.90 (1.94)		32.47 (45.86)		2.14 (7.44)		7.37 (7.11)		−1.48 (13.28)		31.69 (39.09)	
Chernomyrdin visited region in 1994	0.80 (2.33)		88.06 (54.65)		1.19 (8.96)		9.33 (8.56)		−4.81 (15.99)		82.65 (47.05)	
Region had permanent representative in Moscow	−0.22 (1.74)		16.92 (41.11)		−3.65 (6.67)		−3.92 (6.37)		−10.83 (11.90)		30.16 (35.04)	
Bargaining Power of Region												
Population	0.00 (0.00)		−0.04 (0.02)		−0.00 (0.00)		−0.00 (0.00)		−0.00 (0.01)		−0.04* (0.02)	−0.02* (0.01)
Estimated regional output per capita	0.01* (0.00)	0.01** (0.00)	0.59*** (0.09)	0.49*** (0.07)	0.02 (0.01)	0.02* (0.01)	0.02 (0.01)		0.04 (0.03)	0.04* (0.02)	0.51*** (0.07)	0.39*** (0.06)
Republic status	8.18** (2.63)	8.18*** (1.73)	−33.38 (62.77)		6.53 (10.10)		13.19 (9.65)	7.81 (8.28)	−15.78 (18.02)		−27.70 (53.03)	
Man-days lost to strikes, 1993	−0.09 (0.07)		0.84 (1.74)		−0.01 (0.29)		−0.09 (0.27)		0.11 (0.51)		1.08 (1.50)	
Region's governor publicly opposed Yeltsin, September 1993	4.77* (2.17)	4.00* (1.70)	76.16 (50.86)		7.26 (8.33)	10.53 (6.29)	9.87 (7.96)	17.02* (8.08)	13.08 (14.86)		53.83 (43.73)	
Constant	71.42*** (6.47)	82.34*** (6.30)	624.07*** (152.26)	356.19*** (91.62)	76.60** (24.85)	56.81*** (9.15)	82.57** (23.75)	61.18*** (13.67)	147.75** (44.35)	118.26*** (15.28)	451.10** (130.53)	332.01*** (70.95)
R^2	0.680	0.660	0.720	0.668	0.662	0.646	0.704	0.660	0.648	0.610	0.713	0.652
Adjusted R^2	0.542	0.625	0.597	0.627	0.517	0.615	0.577	0.625	0.497	0.582	0.590	0.616
N	70	75	69	73	70	75	70	75	70	75	70	75

Note: Standard errors in parentheses; *$p < 0.5$; **$p < 0.01$; ***$p < 0.001$.

REGIONAL 'WINNERS' AND 'LOSERS': EXPLAINING THE PATTERN

What factors might explain why some regions received large positive fiscal transfers from Moscow, while others did not? In the study already cited, I identified a number of hypotheses rooted in theories of politics in Western federal states and in the declared objectives of Russian leaders.[21] A similar list of theoretically and empirically plausible determinants of central redistribution can be drawn up for 1994.

First, central policy makers may allocate subsidies to recipient jurisdictions with greater 'need' or lower 'ability to pay' for public services. Given the declared mission of the Regional Support Fund, one would expect criteria of need (including those in the Fund's mandate) to help explain where its transfers went. Secondly, besides alleviating need, politicians in Moscow may redistribute income to further various other objectives – supporting the most committed regional economic reformers; aiding particular economic sectors (in Russia, agriculture and producers of raw materials are often accused of benefiting from fiscal favouritism); rewarding efficient tax collection; or buying electoral support. The president may try to link fiscal transfers to recent regional voting results, while parliamentary deputies may try to channel 'pork' to their jurisdictions. Regions that have deputies well-placed in the budget commissions or in parliamentary leadership, or which simply have disproportionately large delegations, may enjoy larger fiscal benefits, if such factors translate into advantages in the parliamentary budget process.

Thirdly, patterns of fiscal allocation may reflect not just central objectives but the lobbying capacity of the recipient jurisdictions. This will depend on access to central decision makers (through permanent representatives in Moscow, visits of high-ranking politicians to the region), and on bargaining power. Bargaining power is ultimately the capacity credibly to threaten disruption of the centre's priorities – whether economic or political. This will depend on the weight of the region in population and economic output, on its administrative status within the institutions of federalism, and on the demonstrated resolve of the regional political elite to oppose central priorities by staging strikes or publicly opposing the president.[22]

Regression analysis was used to test which of the factors listed above could best explain the actual pattern of regional fiscal allocation in 1994. Table 2 shows the results of ordinary least squares (OLS) regressions for an aggregate net transfers variable (including first quarter subsidies, payments from the Support Fund, mutual payments, short-term budget loans and additional budgeted allocations to cities under the Ministries of Defence and Atomic Energy, minus the region's tax remittance to the centre, all in per capita terms). Since this aggregate variable represents only a subset of total centre–region flows, it is important also to analyse the determinants of particular centre–region transfer flows separately (for example, support fund payments, net mutual payments). If the *same* factors seem to influence different streams, this would strengthen confidence in their overall significance. The most important fiscal transfer and tax variables are, therefore, analysed separately in Table 3.[23]

[21] Treisman, 'The Politics of Intergovernmental Transfers in Post-Soviet Russia'.

[22] For a more extensive discussion of the theories on which these hypotheses are based, see Treisman, 'The Politics of Intergovernmental Transfers in Post-Soviet Russia'. For notes on the indicators' construction, see Appendix.

[23] One extreme outlier, the Koryaksky Autonomous Okrug, was excluded from the data for all the regressions except that for the regional tax share since its value for all the other dependent variables was more than 5 standard deviations greater than the mean. The Koryaksky Autonomous Okrug, a sparsely inhabited North-Eastern Territory of 35,000 inhabitants, received more than 6 million roubles per capita in central transfers.

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In both of these tables, columns marked (1) give estimated regression coefficients when a broad range of theoretically plausible predictors are included. Columns marked (2) offer results for short regressions formed by excluding all independent variables that do not significantly improve the fit of the regression, as judged by an *F*-test at the 0.10 level.

The results, especially when compared with those for 1992, offer an intriguing picture of how the underlying logic of fiscal politics is evolving in Russia's poorly consolidated federal democracy.[24] In 1992, neither need nor rapid implementation of economic reform earned a region larger net transfers – in fact, the reverse seemed at times to be the case. Nor did measures of access or pork-barrel politics affect the aggregate pattern. Three factors indicating a region's capacity and resolve to take disruptive action – by strikes, separatist acts and anti-Yeltsin voting – very significantly predicted which regions were the big 'winners' of central redistribution. The regional politics of protest was richly rewarded.

In this regard, the data suggest a marked continuity. Regional expressions of political discontent still seem to elicit outbursts of central generosity. The relationship between anti-reform voting and redistributive benefits seems even to have strengthened since 1991. Each percentage of the electorate which voted in the 1993 parliamentary election for Russia's Choice, the close ally of the Yeltsin administration and government, cost its region about 20,000 roubles per capita in net transfers – or about a fifth of the average net transfer to a region. What particularly strengthens confidence in this result is that it shows up in all the disaggregated transfer streams. A low vote for Russia's Choice translated into significantly higher aggregate net transfers, aggregate transfers, first quarter subsidies, payments from the support fund and net mutual payments.

Not only could a region's population extract greater benefits by voting against President Yeltsin's political allies, it appeared the governor could earn additional roubles for his region by publicly opposing the president at moments of his maximum political weakness. In 1993, there was no obvious recent way of assessing the separatist activism of regional leaders. However, an indicator of loyalty to the Russian president could be constructed from the responses of governors to Yeltsin's decree dissolving the parliament in September 1993. At this time almost all the governors made some public statement, either supporting the president, indicating a neutral position between president and parliament, or, in fifteen cases, explicitly opposing Yeltsin. As history records, the president ultimately won this particular test of wills, dissolved the old parliament, and confirmed the groundrules by which its successor was elected.

One might expect the loyal governors to receive a reward in the 1994 budget. In fact, just the opposite seems to have occurred. Regions where the governor had supported Yeltsin during his critical showdown with the parliament or at least remained neutral seem to have come out worse financially than those whose leaders overtly opposed him. Overall, though the aggregate result is not quite significant, supporting Yeltsin at his moment of vulnerability or remaining neutral appears to have cost a regional governor about 100 thousand roubles per inhabitant in net transfers.[25] Once again, aggressive anti-centre statements were met with central generosity.

Governors who opposed Yeltsin were permitted to retain on average 4 per cent more of total tax revenues in their region. One interpretation might be that this represented

[24] One should note, however, that the analysis for 1992 included a broader but somewhat different subset of fiscal transfers than the analysis for 1994.

[25] This is significant at $p < 0.09$ in the long regression and $p < 0.06$ in the short regression, in two-tailed tests.

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not so much a central policy of appeasement as a central inability to implement *any* policy. Perhaps such governors were not beneficiaries of central largess so much as exploiters of central weakness, readier than their colleagues to cut tax payments unilaterally. Such ambiguities are inherent in any policy of appeasement, which is of essence reactive. But there is also evidence of a central appeasement policy of commission as well as omission. The recalcitrant governors were rewarded with significantly greater direct payments from the Regional Support Fund. This could not be explained by unilateral actions on the part of regional leaders and points clearly to an implicit policy of appeasement emanating from Moscow.

This is particularly surprising since this category of transfers was precisely the one designed to be best shielded from the pressures of politics. The Fund was set up precisely to remove the appearance of injustice and illogicality. Payments were to be made according to the formulae for 'needy' and 'especially needy' provinces. As President Yeltsin himself said at the introduction of the Fund: 'We are leaving behind forever the practice of endless haggling between the centre and the regions whereby each party tries to get a bigger share. This has generated enormous resentment, suspicion and abuses. Now things will be different.'[26] The evidence suggests, however, that the Fund's criteria were supplemented in the implementation by the political rationales of the past.

The official criteria did indeed influence Support Fund allocations. 'Especially needy' provinces – i.e., those whose regional expenditures in 1993 had exceeded the average region's budget revenues – received greater transfers from the Fund, in first quarter subsidies, and even in net mutual payments. Together, these benefits added up on average to about 350,000 roubles per capita. The 'needy' categorization – lower than average 1993 budget revenues – seems at first sight less significant, but this may well be due to the fact that the regressions already control for the level of per capita profits in the region. (Low revenue regions would tend to be those with low profits.) Redistribution – through all the fiscal channels examined – appears to have continued to favour less profitable regions (i.e., those with low profits for a given level of economic output). Yet, while redistribution favoured big spenders and currently unprofitable regions over their frugal and efficient neighbours, it did not seem to be channelling development aid to the regions with the poorest provision of social infrastructure. Given a region's level of past revenues and spending, those least equipped with doctors, telephones and access to television signals received on average *lower* central transfers.

While public expressions of discontent or disloyalty continued to earn regions a premium, the relative role of different kinds of protests had changed somewhat since 1992. One notable difference is the weakened influence of the strike weapon. Whereas 1991 had been the height of a wave of labour mobilization, with political strikes frequently shutting down coal mines and other enterprises, 1993 saw a dramatic decrease in the number of strikes and the losses caused by them.[27] By 1994, the relationship between strikes and transfers had disappeared.[28] It is tempting to view the replacement of strikes by voting and governors' declarations as an institutionalization of the politics of protest, perhaps comparable to the institutionalization of conflict observed in other cases of democratization.[29] However, such a judgement would probably be premature.

[26] 'Boris Yeltsin: danger of Russia's collapse has passed' (interview with President Boris Yeltsin), *Trud*, 26 August 1994, pp. 1–2, translated in Federal Broadcast Information Service, *FBIS-SOV-94-166*, pp. 10–15.

[27] Man-days lost to strikes in 1993 were ten times lower than in 1991.

[28] I also tried, as before, including the strike variable in a log formulation, but it was still insignificant.

[29] See Dankwart Rustow, 'Transitions to Democracy: Toward a Dynamic Model', *Comparative Politics*, 2 (1970), 337–64.

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The contrast between the two years may merely reflect the particular circumstances in 1994, when the December 1993 parliamentary election and constitutional referendum had given such a clear and recent measure of regional opinion, and labour mobilization had abated for a variety of reasons.

Other results suggest the relative weight of different power resources in the emerging allocation process. The 1992 data contained no evidence that regions with greater access – through permanent Moscow representatives or visits of high officials – were able to extract greater benefits. In 1994, however, some hints of the importance of such access were discernible. Political lore in Moscow has it that visits by Yeltsin are accompanied by outpourings of cash. Yeltsin himself seemed to admit this regretfully in an interview in 1994:

> I have repeatedly heard rebukes along the lines that the president takes a bag of money with him on his trips and certain lucky enterprises receive support. I admit that I don't like that idea either. The president is not an ambulance. You can't salvage the situation or cure the country like that. You can't visit everyone who's in a bad way.[30]

During a vacation in Sochi, Yeltsin reportedly agreed to a series of measures proposed to him by the region's governor, ranging from financial aid to a bid to host the 2002 Winter Olympics. 'If the state's top men continue to take regular vacations on our coast,' one local journalist gleefully observed, 'the Kuban will soon become the most prosperous region in Russia'.[31]

So it is surprising to find that there was no evidence of visits by Yeltsin leading to a disproportionately large allocation under any of the examined transfer flows. What aid is offered either goes to enterprises rather than regional budgets, comes long in the future, is not delivered as promised, or does not change the overall pattern of such transfers. Visits by Chernomyrdin, however, did seem significantly to enrich his hosts. The implicit payoff for a visit by the prime minister was some 173,000 roubles per regional resident.[32] Not having a permanent representative in Moscow still did not appear to make any difference to a region's chances – presumably since there were so many other channels of contact.

The regressions suggest some interesting results about the ability of parliamentary deputies to channel 'pork' to their jurisdictions. Chairmanship (or deputy-chairmanship) of either a house of parliament or of one of the budget commissions did not translate into greater benefits for supporters at home. But having at least one regional representative on either of the houses' budget commissions was associated with a more favourable deal for the region on the proportion of tax it could retain. And, rather surprisingly, the actual number of deputies the region had in the Duma per regional inhabitant was significantly related to its receipts of aggregate transfers. Each additional representative a region had per million inhabitants earned it on average an extra 72,000 roubles per capita in net transfers.

The regions varied quite widely in the scale of their representation. While the average region had one representative per 267,000 inhabitants, the Republic of Sakha's 1.1 million residents had only one representative between them. Their neighbours in the Evenkisky Autonomous Okrug were rather more fortunate, with one

[30] 'Boris Yeltsin: danger of Russia's collapse has passed'.

[31] S. Alekseyeva, 'Benefits of a Vacation in Sochi', *Sovetskaya Rossiya*, 29 March 1994, p. 3, translated in Federal Broadcast Information Service, *FBIS-SOV-94-060*, p. 31.

[32] It is, of course, possible that Chernomyrdin merely selected regions that were being fiscally favoured to visit.

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representative for 23,000. Because the party lists in the 1993 election contained so many political insiders, the city of Moscow also had far more representatives than its share – one per 63,000 residents. These findings would seem to suggest a rather surprisingly unstructured and egalitarian system of power in the parliament – in which the sheer number of deputies behind a given proposal carried more weight than their positions in the leadership.

As in 1992, less populous provinces received significantly greater net transfers. Rather than endowing regions with greater bargaining power, large population seemed to work against a region's fiscal interests. Perhaps the access which even tiny regions receive due to their administrative status enables them to extract benefits disproportionate to their populations. The benefits of overrepresentation in the Duma may be matched by lobbying advantages conferred on regional governors by virtue of their office. Both of these factors would seem to benefit the particularly tiny regions. These lobbying advantages of small regions may slightly offset central attempts to buy electoral support efficiently, but the political factors clearly dominate.

Finally, as in 1992, there was no evidence that fiscal transfers favoured regions more advanced in economic reform or those most efficient at collecting taxes. Nor did policy favour or discriminate against major raw material producing regions. The results suggest that agricultural regions were overall losers in the distribution of these particular transfers. But this may have been compensated by targeted agricultural subsidies and credits, for which regional breakdowns were not available.

In brief, the results suggest a nuanced picture of the competitive process in one important sphere of Russian central politics. It is a process in which electoral laws matter, and in which elections do affect the course of events. The findings imply a surprisingly unhierarchical power structure within the parliament, in which the sheer number of deputies made more difference than the positions they held, and membership on the budget commission seemed often as effective for rounding up 'pork' as leadership of it. And, most importantly, the analysis reveals a centre which, as in 1992, was rolling with the punches of regional opponents, appeasing the most assertive malcontents, and responding to voting patterns as flexibly as one would expect of Western party bosses. Despite an attempt at rationalizing the fiscal system, the politics of votes, threats and bargaining appears to have crept into even the institutions specifically designed to overcome such politicization. The results impose costs in equity and in the efficiency of reform, but, in this author's analysis, ultimately strengthen national integration and reduce the danger of the federation's collapse.[33]

So far, this Note has analysed the pattern of fiscal transfers – and the nature of the political factors which determined it – in a particular year, 1994. But an equally interesting question concerns short-run *changes* in the level of fiscal transfers. The most

[33] Treisman, *After the Deluge: The Politics of Regional Crisis in Post-Soviet Russia*. An additional question worth considering is whether the results presented above are capturing a *continuous* relationship which holds across all the eighty-nine regions – or a sharp disparity in Moscow's strategies in dealing with a dozen or so adamant troublemakers and the other more docile regions. Does Moscow just appease these problem republics? In fact, the two protest variables – voting against Russia's Choice and a governor opposing Yeltsin in the 1993 crisis – are even *more* significant when the short-form regression is run excluding the ten most extreme 'winners' from fiscal redistribution. The same logic of appeasement underlies the centre's relations with the less vociferous protesters. And, interestingly, the relationship between an 'especially needy' classification and greater net transfers disappears when these ten troublemaker regions are excluded. Among more docile regions, there is even *less* evidence of allocation responding to need.

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protest-prone regions may receive greater benefits, year after year. But does an increase in the level of hostility towards the central regime in a particular year translate into an increase in central funds?

For the first time, data are available which allow some limited analysis of this question. Figures for a relatively comparable subset of budget transfers in 1993 and 1994 were obtained by the author from Aleksei Lavrov, of the president's analytical research centre, so it is possible to examine the possible determinants of change between the two years. Unfortunately, constructing indicators of the change in the degree of separatist assertiveness of regions is extremely difficult. By its nature, a sovereignty declaration is not something a region would wish to have to issue annually. This renders it problematic to judge the impact of small increments in elite protest.

However, measuring the change in mass voting patterns is somewhat easier, since roughly comparable elections or referendums are held at periodic intervals. Though no two elections in a country without a structured party system are directly comparable, a rough measure of the change in support for Yeltsin and his allies can be formed from the 1991 presidential and 1993 parliamentary election results. A variable was constructed measuring the difference between the vote for the three most pro-reform parties in the December 1993 election (Russia's Choice, the RDDR, and Yabloko) and the vote for Yeltsin in June 1991. Based on the previous analysis, we would expect a negative relationship between the change in the level of pro-reform voters and the subsequent change in fiscal transfers – a region where support for reformers was dropping fastest would get the largest increases in redistributed cash.

Bivariate correlations suggest exactly such a relationship with the change in transfers and net transfers between 1993 and 1994. The correlation between the change in pro-reform votes (1991–93) and the change in central transfers (1993–94) was -0.21, significant at $p < 0.05$. And the correlation between the change in pro-reform votes and the change in *net* central transfers (from which tax remittances have been subtracted) was -0.40, significant at $p < 0.001$. Relatively larger drops in regional support for Yeltsin and his allies were rewarded with larger increases in central largess the next year.[34]

CONCLUSION

Few types of data offer as objective and revealing a picture of the inner workings of a state as the flows of money through its fiscal institutions. Official pronouncements are often designed to mislead; rulebooks often leave out the most important rules. Descriptions of the nature of political power and process – even those of lifelong participants – can be highly subjective and incomplete. Close observation can illuminate only a small subset of state institutions rather than the way these are integrated.

This Note – and the project of which it is part – attempts to understand the changing nature of Russia's political process through examination of the results of central fiscal redistribution. It takes its cue from Schumpeter, the inventor of 'fiscal sociology', and his contemporary Rudolf Goldscheid, for whom the national budget constituted 'the

[34] A more complicated regression analysis of the change in net transfers in 1993–94 confirmed that a prior drop in pro-reform votes was associated with a subsequent increase in net transfers, even when controlling for various possible confounding factors. Details are available from the author upon request.

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skeleton of the state, stripped of all misleading ideologies'.[35] All Russia's regional governments would like to receive larger transfers from the centre and pay Moscow lower taxes. But some succeed while others fail. Why?

One answer emerges quite powerfully from analysis of two separate years of Russia's post-Soviet fiscal history – 1992 and 1994. In themselves, these years were quite different – one, the first, chaotic learning period of a government of economic reformers, the second a far more settled year, after most of the convinced monetarists had left office. One year passed before any system had been worked out for regional policy, the second after an explicit framework had been incorporated into the budget. The data available for the two years included a different subset of central transfers as well as the regional tax remittances. So it is quite surprising – and strengthens confidence in the results – that a similar set of factors was significant in both years and across different transfer and tax streams.

What earned a region greater net transfers from Moscow in the early 1990s was in large part the demonstrated capacity and resolve of local mass or elite actors to express opposition in potentially disruptive ways. Instead of rewarding loyalists, the central government appeased its harshest critics.[36] Those regions that voted against Yeltsin in 1991 and against the pro-Yeltsin Russia's Choice bloc in December 1993, that issued early sovereignty declarations, and whose governors opposed Yeltsin publicly in his conflict with the parliament in September 1993 all seem to have received larger net central transfers in subsequent years. At the height of labour mobilization in 1991, extensive strikes also earned a region fiscal benefits, though by 1993, a year of relative labour quiescence, this effect had disappeared.

The political consequences of Russia's pattern of central fiscal appeasement are the subject of debate. Some have suggested that the politicized process of allocation has posed a threat to Russia's stability.[37] I have argued that, on the contrary, the practice of appeasing mobilized anti-centre regions was one reason why, despite separatist pressures, economic crisis, and weakened central institutions, Russia did not disintegrate in the early 1990s as all three other post-communist federations had done.[38]

The analysis of Russia's fiscal outcomes suggests an interpretation of political power and process in the early 1990s which differs in some significant ways from the conventional wisdom. First, it suggests that, though public cynicism about the depth of democratization may be partly justified, the introduction of elections has importantly changed the logic of power in Russia. Elections provide information which central elites use to redirect fiscal resources. They are not just the occasions on which politicians are thrown out of office, they are the moments when others learn what they need to do in order not to be. Politics in Russia is characterized by a duel of one against eighty-nine, in which the centre must always respond to those that seem readiest to draw. Elections have become a relatively risk-free way of finding out whose finger is closest to the trigger.

[35] Quoted in Joseph A. Schumpeter, 'The Crisis of the Tax State', in Richard Swedberg, ed., *Joseph A. Schumpeter: The Economics and Sociology of Capitalism* (Princeton, NJ: Princeton University Press, 1991), pp. 99–140.

[36] While some of these results might be attributed to initiatives of *opponents* of Yeltsin in parliament, others (mutual payments, regional tax shares) depended far more directly on the central Ministry of Finance, subordinate to the government.

[37] For instance, Lavrov, 'Rossiiskiy Byudzhetny Federalizm; Solnick, 'The Political Economy of Russian Federalism'.

[38] Treisman, *After the Deluge*.

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Secondly, it suggests that while all conflicts between Moscow and the regions contain risks for both sides, the purpose of some challenges to central authority may be less to change central institutions, policies or officials – or to secede from them – than to get their attention. Some protests which seem system-threatening may actually be part of a larger mechanism of integration. And some subnationalist demands made by leaders of ethnic regions, though thought by some observers to be motivated by primordial identity and historical antagonism towards Russian domination, may serve an instrumental purpose within the system of Russian institutions.[39]

Thirdly, while corruption and non-transparency are certainly endemic to the Russian state, the resources which fuel successful lobbying for fiscal transfers are more public – overt threats of disruption – than private – unequal access, friendly relations, intimate visits. The latter may provide benefits too small or universal to affect the overall pattern of distribution; or they may provide others too thoroughly concealed to show up in official statistics. But many of the most significant battles over public money are fought out on more open terrain. The impression of various observers that policy in Russia emerges from the secret interplay of unconstrained authoritarian leadership cliques with shadowy economic and regional interests leaves out perhaps the most important element of the new Russian political mix – the very public process of threats and bargaining through which central and regional leaders, simultaneously united and divided by their desire to win votes, both generate conflicts and come to terms.

APPENDIX: NOTES ON SOURCES AND CONSTRUCTION OF INDEPENDENT VARIABLES

Need and Ability to Pay

Need classifications are from Russian State Budget, 1994; profit figures from Goskomstat RF. The social infrastructure indicator is the first factor extracted from factor analysis of the following five statistics: (a) the number of doctors per capita in 1993 (factor loading: 0.867; from Goskomstat RF, *Rossiisky Statistichesky Yezhegodnik 1994*, pp. 530–2); (b) the proportion of urban households with a telephone or access to one in 1991 (factor loading: 0.783; from Goskomstat RF, *Sotsial'noe Razvitie Rossiskoi Federatsii v 1992*, pp. 235–6); (c) the proportion of population in the region able to receive television signals in 1992 (factor loading: 0.435; from Goskomstat Rossii, *Sotsial'noe Razvitie Rossiskoi Federatsii v 1992*, pp. 281–3); (d) the number of hospital beds per 10,000 residents in the region in 1993 (factor loading: 0.052; from Goskomstat RF, *Rossiisky Statistichesky Yezhegodnik 1994*, pp. 533–5); (e) the average housing space per capita in 1992 (factor loading: − 0.078; from Goskomstat RF, *Sotsial'noe Razvitie Rossiskoi Federatsii v 1992*, pp. 146–8). (The latest available data were used in each case.) This factor explains 31 per cent of the variation in these five variables.

Electoral Interests of Central Policy Makers

Vote totals in the 1993 election were taken from official results; representatives per capita were calculated from Michael McFaul and Nikolai Petrov, *Politichesky Al'manakh Rossii 1995* (Moscow: Carnegie Endowment for International Peace, 1995); membership of commissions from *Russian Government Today* (Spring 1994).

[39] Daniel Treisman, 'Russia's "Ethnic Revival": The Separatist Activism of Regional Leaders in a Post-Communist Order', *World Politics*, 49 (1997), 212–49.

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Other Central Objectives

Agricultural output per capita, in thousand roubles per capita; raw materials output in percentage of total Russian raw materials output (data from Goskomstat RF publications). The index of advanced pace of economic reform is the first factor extracted from a factor analysis of the following three variables: (a) the proportion of apartments privatized as of January 1994 (factor loading: 0.818; from Goskomstat RF, *Sotsial'no-Ekonomicheskoe Polozhenie Rossii 1994* (Moscow: Goskomstat RF, 1994), pp. 306–8); (b) the number of private farms per thousand rural inhabitants in January 1994 (factor loading: 0.763; from Goskomstat RF, *Ekonomicheskoe Polozhenie Regionov RF 1994* (Moscow: Goskmostat RF, 1994), pp. 290–1; for Moscow and St Petersburg set at the mean value); and (c) the number of commodity exchanges in the region per capita in 1993 (factor loading: 0.452). This factor explained 49 per cent of the variation. The 'tax effort' index is calculated by Roy Bahl's method using 1993 data.[40] It measures the ratio of the tax actually collected in the region to an estimate of that region's 'taxable capacity', derived by regressing tax collected on per capita gross value of industrial output, the average monthly wage, the percentage of the population living in urban areas, and the population size.

Institutional Access

Tallies of visits compiled from reports in FBIS; permanent representative listings from *Russian Government Today* (Spring, 1994).

Bargaining Power of Region

Population from Goskomstat RF, *Rossiisky Statistichesky Yezhegodnik 1994;* industrial, agricultural and services output for 1993, from Goskomstat RF; man-days lost to strikes, from *Rossiisky Statistichesky Yezhegodnik 1994;* regional governor's stance in September–October 1993, from Elizabeth Teague, 'North–South Divide: Yeltsin and Russia's Provincial Leaders', *RFE/RL Research Report, 2,* No. 47 (26 November 1993), and accounts in Federal Broadcast Information Service reports. 'Governor' here taken as head of administration of oblasts and *kraia*, and president – or, if none, chairman of Council of Ministers – of republics.

[40] See Roy Bahl, 'Revenues and Revenue Assignment: Intergovernmental Fiscal Relations in the Russian Federation', in Wallich, ed., *Russia and the Challenge of Fiscal Federalism.*

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Comment on 'The Politics of the Political Business Cycle'

SIMON PRICE*

In a thought-provoking paper, Schultz[1] develops an idea first put forward in a number of papers by Frey and Schneider[2] and argues that governments will have less incentive to manipulate the economy when they lead in the polls. This helps to explain why electoral cycles have been so hard to detect. As other authors have observed, the best evidence suggests that electoral cycles (in output or instruments) are weak and irregular.[3] This makes a lot of sense. Since the pathbreaking work of Kydland and Prescott and Barro and Gordon[4] it has been widely appreciated that artificial electoral cycles may bring a heavy cost. In the economic literature, this cost is primarily a reputational one, implying that governments are forced to operate at higher levels of inflation than they would otherwise prefer. Schultz argues convincingly that the loss of economic reputation has a further *political cost*.[5] Moreover, there is another, straightforward, reason why governments may be reluctant to manipulate the economy. If parties have preferences about the state of the economy *independent of any desire to be re-elected* – which, surely, they do and is the assumption of every extant formal model of the political business cycle – then electoral manipulation drives them away from their ideal 'bliss' point, which is in itself a cost. This is the view underlying the signalling model of the pre-electoral cycle introduced by Rogoff and Sibert.[6] It is this latter cost we

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[1] Kenneth A. Schultz 'The Politics of the Political Business Cycle', *British Journal of Political Science*, 25 (1995), 79–99.

[2] For example, Bruno Frey and Friedrich Schneider, 'A Politico-Economic Model of the United Kingdom', *Economic Journal*, 88 (1978), 243–53. Frey and Schneider were subjected to a severe critique at the time: see Alec Chrystal and James Alt, 'Public Sector Behaviour: The Status of the Political Business Cycle', in David Currie, Robert Nobay and David Peel, eds, *Macroeconomic Analysis* (London: Croom Helm, 1981).

[3] Alberto Alesina, 'Macroeconomic policy in a Two-Party System as a Repeated Game', *Quarterly Journal of Economics*, 102 (1987), 651–78; Alberto Alesina, 'Macroeconomics and Politics', *NBER Macroeconomics Annual* (Cambridge, Mass: MIT Press, 1988); Alberto Alesina 'Evaluating Rational Partisan Business Cycle Theory: A Response', *Economics and Politics*, 5 (1990), 1–30; Alberto Alesina, G. Cohen and N. Roubini, 'Electoral Business Cycles in Industrial Democracies', *European Journal of Political Economy*, 9 (1993) 1–23; Stephen Sheffrin, 'Evaluating Rational Partisan Business Cycle Theory', *Economics and Politics*, l (1989) 239–60.

[4] Finn Kydland and Edward Prescott, 'Rules Rather Than Discretion: The Inconsistency of Optimal Plans', *Journal of Political Economy*, 85 (1977), 473–91; Robert Barro and David Gordon, 'Rules, Discretion, and Reputation in a Model of Monetary Policy', *Journal of Monetary Economies*, 12 (1983) 101–22; Robert Barro and David Gordon, 'A Positive Theory of Monetary Policy in a Natural Rate Model', *Journal of Political Economy*, 31 (1983) 589–610. See also David Backus and John Driffill, 'Inflation and Reputation', *American Economic Review*, 75 (1985), 530–8. Many of the key references are collected in the two volumes by Torsten Persson and G. Tabellini, eds, *Monetary and Fiscal Policy* (Cambridge, Mass.: MIT Press, 1994), who survey the wide area of policy and credibility.

[5] Empirical work by David Sanders and Simon Price, 'Disentangling the Relationship Between Party Support and Perceived Economic Competence: Some Evidence for the UK, 1991 to 1995' (London: City University Economics Department Discussion Paper, 1996) supports this proposition.

[6] K. Rogoff and Anne Sibert, 'Equilibrium Political Business Cycles', *Review of Economic Studies*, 55 (1988), 1–16, developed a model based on signalling uncertain competence. Torsten Persson and G. Tabellini, *Macroeconomic Policy, Credibility and Politics* (Chur, Switz.; Harwood Academic Publishers, 1990), extend the model from spending to macroeconomic management.

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emphasize in the formal model, although clearly the preceding discussion also applies. The simple point that Schultz makes is that, given the existence of costs to pre-election booms, no matter what their provenance, popular governments will have less incentive to manipulate the economy for electoral purposes.

However, this is only half the story. For it is possible to argue that very *unpopular* governments should also stay close to their bliss points. The reason for this is that the cost of restoring popularity is very high for unpopular governments as the (costly) macroeconomic manipulation required becomes increasingly large as the popularity hurdle rises. If they are sufficiently unpopular, the costs may greatly exceed the benefits (of re-election). If this were the case, there should be a non-linear, inverted-U shape discernible in the data. However, this argument, while spelt out in some formal detail below, does not exhaust the possibilities. For example, party leaders often fail to survive (in a political sense) lost elections. Thus if we take a 'managerial' or principal-agent view of the electoral process, election defeat may concentrate the mind wonderfully. The point is that, for the party leader (acting as the agent for the party or electorate), the consequences of defeat far outweigh the cost to the party or electorate (the principals) of pursuing the 'wrong' economic policy. This may lead to low popularity levels inducing extreme economic behaviour. Another explanation that may apply in some cases is that an unpopular government can plan to leave a poisoned fiscal chalice. For example, disliking public expenditure, a right-wing government might lower taxes or raise transfers to increase the deficit and prevent any new government from increasing spending.[7]

The point of this discussion is that there are good reasons to suppose non-linearities exist in the relationship in question. This particular hypothesis has not been tested. Schultz tests a linear version and claims to find some support for the model. But we believe that linearity is a misspecification. The purpose of this Note is briefly to present a new, formal model of the 'responsible unpopular' government, and to estimate a generalization of the Schultz specification. In passing, we also allow for cointegration in the dataset, a problem Schultz pushes to one side, and remove the autocorrelation that persists in his model. Our results show that Schultz's hypothesis is indeed correct and we are able to confirm his basic results, while refining the specification somewhat.[8]

A MODEL OF UNPOPULAR RESPONSIBILITY

The simple point we wish to make in this section is that while popular parties have less incentive to manipulate the economy to bring about a return to office than less popular parties, *very* unpopular parties can only increase their chances of re-election by large doses of costly intervention. This may imply that the cost of attempting to remain in office outweighs the benefit. The prediction, then, is that both popular and unpopular parties behave responsibly. However, given our discussion above, other factors may pull in an offsetting direction.

[7] This idea has been explored by Alberto Alesina and G. Tabellini, 'A Positive Theory of Fiscal Deficits and Government Debt', *Review of Economic Studies*, 57 (1990), 403–14; see Ben Lockwood, Apostolis Philippopolous and Andrew Snell, 'Fiscal Policy, Public Debt Stabilisation and Politics: Theory and UK Evidence', *Economic Journal*, 106 (1996), 894–911, for an extension applied to Britain.

[8] A fuller treatment and an extension to other datasets is given in Simon Price, 'Government Popularity and the Political Business Cycle' (London: City University Economics Department Discussion Paper, 1996).

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We can put this rather more formally using a simple dynamic programming approach.[9] Define V^I and V^O as the value functions corresponding to the party being in power (I for incumbent) and in opposition (O for opposition), respectively. The discrete time period is to be thought of as one term of government. Then

$$V^I = U(x) + g + p\frac{V^I}{(1+r)} + (1-p)\frac{V^O}{(1+r)}; \qquad g > 0 \tag{1}$$

and

$$V^O = q\frac{V^I}{(1+r)} + (1-q)\frac{V^O}{(1+r)}, \tag{2}$$

where x is the policy instrument, $U(x)$ is the flow objective function, g is the flow return from being in office, p is the probability of remaining in office, q is the probability of being returned to office, and r is the government's subjective rate of time preference. The variable g is important here. It indicates that politicians have a desire to remain in office quite independent of what they do there. The variable p is a function of the policy instrument x. We assume the objective function is quadratic[10] in x and that p is a linear logit function of x, which is suggested by statistical theory.[11]

$$\ln(p/(1-p)) = \alpha + \beta x. \tag{3}$$

Here, α can be interpreted as the 'base' level of support when x is zero. We assume q to be exogenous. Solving for V^I in terms of p, and maximizing V^I with respect to x subject to Equation (3) yields optimal x as the (unique) solution to the following expression:

$$x = h(x) = \left(g - \frac{x^2}{2}\right)\frac{p(x)(1-p(x))\beta}{(1+q-p(x)+r)}. \tag{4}$$

The base support level, α, captures the idiosyncratic, non-economic, factors that shape political events, and is determined by historical events. As an empirical matter, most of the variation in the time-series of popularity is accounted for by exactly these non-economic factors.[12] Thus α changes over time (although not in our formal model here). In terms of our model, part of the variation in p is due to economic management summarized in x; but the rest is determined by changing α. Analytically, by varying α, we can map out the relation between x and p, giving a relationship between optimal x^* and p^*, say,

$$x^* = g(p^*; \alpha), \tag{5}$$

where $(\cdot;\alpha)$ indicates that the pair (x^*, p^*) vary as α varies. The logic is that if α changes, choice of x^* changes which in turn (via Equation 3)) changes p^*. This is illustrated in

[9] More details are given in Price, 'Government Popularity and the Political Business Cycle'.

[10] This is a standard functional form which has the nice properties of symmetry (deviations from the bliss point are penalized equally), increasing costs (the further from the bliss point, the more rapidly costs increase), and tractability (the first order conditions are linear). Implicitly, the bliss point is fixed at zero, but this is an arbitrary normalization made for simplicity.

[11] Simon Price and David Sanders, 'Modelling Government Popularity in Post-War Britain', *American Journal of Political Science*, 37 (1993), 317–34.

[12] The classic example may be the impact of the Falklands War on Mrs Thatcher's support in 1983; Price and Sanders, 'Modelling Government Popularity in Post-War Britain'.

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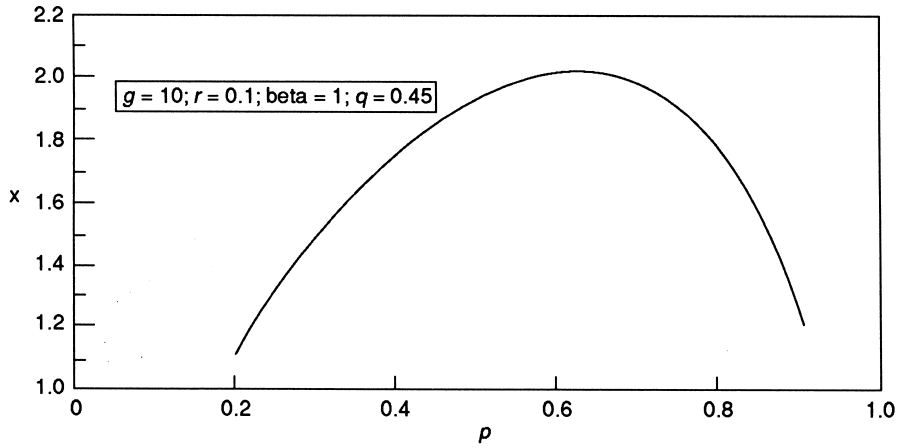


Fig. 1. Popularity and optimal surprise, x*; conditional on* α.

Figure 1. The figure shows the optimal choice of x and therefore also of p given α. It is drawn for particular values of the parameters, but the shape holds more generally. Both popular and unpopular governments should act responsibly. This function, then, should be seen as the reduced-form relation between p and the instrument, x. In the estimation below, we attempt to parameterize this relationship (Equation (5)), albeit with a somewhat richer set of conditioning variables in practice.

DATA

Following Schultz, we define (log) real transfers tr_t as the National Accounts variable 'Current grants and subsidies' (deflated by the Retail Price Index), which was about 37 per cent of total expenditure in 1993. Schultz conditions on GDP, unemployment and the balance of payments, with a dummy for the October 1974 election. Of these, GDP and unemployment make obvious sense. Moreover, transfers, GDP and unemployment[13] are all I(1) variables, as Table 1 shows.[14] But the balance of payments is less likely to be I(1), and is hard to justify as a *long-run* determinant of transfers – if it does enter, it should be as a short-run conditioning variable.

Given the existence of a unit root in the series, we need to model the long-run or cointegrating trend in order to estimate a short-run reaction function for the interaction

[13] Real transfers *tr* are (log) 'Current grants and subsidies' (CSO code ABKD) deflated by the RPI; *gdp* is (log) real factor cost GDP at 1990 prices; *u* is the (log) UK unemployment rate. The number of observations (*n*) reported in the table differs for each variable as the availability of data varies; we used the longest run possible for the stationarity tests.

[14] As reported below, we find that the cointegrating relationship for *tr* requires a structural break in the relationship with GDP. We therefore test for a structural break in the univariate unit root test. However, this does not surface in the data. This is probably because the change in the relationship with GDP coincided, and, indeed, was likely to have been caused by, the start of the secular rise in unemployment. In the univariate test these two effects appear to offset each other.

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TABLE 1 *Tests for Order of Integration: ADF(4)*

Variable	*I*(0)	*I*(1)	*n*
tr	− 1.95	− 5.52	145
*tr**	0.87	− 5.31	145
gdp	− 1.10	− 5.00	157
u	− 2.23	− 6.01	176

Note: 5% critical value = − 2.9; *tr** allows for the structural break at 1974.

of transfers with popularity. Schultz fails to address this directly. The presence of residual autocorrelation in his model suggests that he fails to identify a cointegrating long-run relationship. Thus, in the next section we estimate an error correction specification embodying a structural break, and conditioning on (log) GDP (*gdp*) and (log) unemployment (*u*).[15] The structural break is necessary to account for an apparent change in the relationship between transfers and GDP that occurred after 1974, coincident with the rise in unemployment, the slow-down in growth of the 1970s, and the moves to more conservative fiscal and monetary policies that occurred around this time.

SPECIFICATION

To reiterate, we expect, like Schultz, to observe a link between policy instruments and popularity. Unlike Schultz, we expect some form of non-linear relationship. We model the non-linear reduced form relationship between *x* and *p* illustrated in Figure 1 with a low-order polynomial in *p*.[16] The way to think about this is that the government has some control over popularity via instruments such as transfers (*x*). Nevertheless, popularity is also affected by innumerable factors outside the governments control (the 'α'). Choice of transfers at any moment is conditioned by the past history of popularity, even though current and future popularity is itself partly determined by those same transfers. There must, in practice, be a lag structure in operation. All this is embedded in the following error correction specification, which lets us test for the existence of cointegration while simultaneously estimating the short-run dynamics. This is important, given that *tr*, *gdp* and *u* are all non-stationary variables.

$$\Delta tr_t = \alpha_1 + \alpha_2 s + \lambda_0 tr_{t-1} + \lambda_1 gdp_{t-1} + \lambda_2 sgdp_{t-1} + \lambda_3 u_{t-1} + \sum_{j=0}^{3} d_{t+j}(\beta_0^j + \beta_1^j p_{t-1} + \beta_2^j p_{t-1}^2 + \beta_3^j p_{t-1}^3)$$

[15] But excluding the balance of payments for the reasons discussed above.

[16] Our results are not directly comparable with Schultz, for a number of reasons, including the treatment of non-stationarity. We also use the level of support as our political measure, where *p* is the standard poll-of-polls popularity score for the government, rather than the lead. This is more in line with our formal model, and as we have moved some way away from Schultz's specification already, we did not feel constrained to use his precise variable. Clearly, popularity is not identical with '*p*', the probability of being re-elected. However, it is clear there must be a monotonic relationship between the two.

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$$+\sum_{i=1}^{2}\gamma_i^1\Delta tr_{t-i}+\sum_{i=1}^{2}\gamma_i^2\Delta gdp_{t-i}+\sum_{i=1}^{2}\gamma_i^3\Delta u_{t-i}$$
$$+\sum_{i=1}^{4}\delta_i d_{t-i}+\sum_{i=1}^{4}\delta_i^c(dc)_{t-i}$$

where d is an election dummy taking the value 1 in an election quarter and 0 elsewhere and c is a governmental dummy, taking the value 1 when a Conservative administration is in power and 0 elsewhere.[17] In this equation, we introduce a structural change in the slope coefficient on *gdp*. This also requires a change in the intercept (α_i), and we employ a shift dummy s taking the value 1 before 1973q4 and 0 thereafter. The coefficient λ_0 is the error correction term, and offers a test of the hypothesis that {*tr*, *gdp*, *u*} form a cointegrating set[18] distributed asymptotic standard normal under the nulls of either cointegration or non-cointegration. The remaining X_i can be transformed to give the long-run coefficients (say $\theta_i = -\lambda_i/\lambda_0$). The d_{t+j} terms allow election effects (interacting with popularity) to come in j periods prior to the election. It is in these terms that we are mainly interested. In addition, we allow for post-election effects via the d_{t-i} terms. We distinguish Conservative administrations separately with the c dummy. This allows post-election effects that differ between administrations to come in, an extremely likely possibility. We expect Conservative administrations to be tougher on transfers than Labour ones.[19] Focusing on the popularity interactive terms, we have defined twelve new variables. There are nine elections in the sample so these variables are mainly zeros. On the face of it, we have an effective sample size of nine! But this is misleading. Our variables are similar to on–off dummies, and standard likelihood ratio or Wald tests on the significance of individual variables or sets of variables have the usual properties. Nevertheless, there is a problem of inference. Although we can conduct tests of joint significance without difficulty, the standard errors on the four β^j in each set are likely to be large.[20] But to reiterate the point, although individual standard errors are large, the joint tests are still valid. To anticipate, those joint tests reveal there is definitely a non-linear relationship at work. Note also that although transfers partly determine popularity (if this is not true the point of this exercise disappears, after all), the potential problem of simultaneity is sidestepped as popularity is always lagged at least one period, and is therefore predetermined. Thus OLS is an appropriate estimator.

RESULTS

This relationship was estimated over the period 1958q4 to 1994q4, using a slightly longer series than Schultz. A restricted parameterization was then estimated on the basis of a series of sequential exclusion tests. The final, restricted, specification is given in Table 2.[21]

[17] We also add seasonal dummies.

[18] J. J. M. Kremers, Neil R. Ericsson and Juan J. Dolado, 'The Power of Cointegration Tests', *Oxford Bulletin of Economics and Statistics*, 54 (1992), 325–46.

[19] Schultz does not allow this possibility.

[20] This issue is explored further in Price, 'Government Popularity and the Political Business Cycle', using Monte Carlo techniques to develop a joint standard error. But the joint Monte Carlo errors suffer from the same problem as those on the individual coefficients and do not help us here.

[21] The likelihood ratio test of the full set of restrictions on the short-run dynamics compared to the general dynamic specification is $\chi^2_7 = 7.04$.

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TABLE 2 *Transfers and Elections: 1958 to 1994*

Parameter	Estimate	*t*-ratio
α_1	1.14	2.39
α_2	− 0.58	− 1.60
λ_0	− 0.22	− 2.81
λ_1	0.19	2.77
λ_2	0.13	1.58
λ_3	0.039	2.28
β_0^0	− 16.83	− 1.21
β_1^0	1.16	1.25
β_2^0	− 0.026	− 1.30
β_3^0	0.00020	1.34
β_0^1	28.14	2.05
β_1^1	− 1.94	2.00
β_2^1	0.044	1.96
β_3^1	− 0.00033	− 1.91
β_0^2	3.19	0.66
β_1^2	− 0.22	− 0.66
β_2^2	0.0051	0.64
β_3^2	− 0.000037	− 0.62
β_0^3	4.40	1.20
β_1^3	− 0.33	− 1.24
β_2^3	0.0084	1.30
β_2^3	− 0.000070	− 1.36
γ_1^1	− 0.26	− 2.56
γ_2^1	− 0.12	− 1.31
γ_1^3	0.073	1.80
γ_2^3	0.11	2.83
δ_2	0.039	1.89
δ_2^c	− 0.052	− 1.97

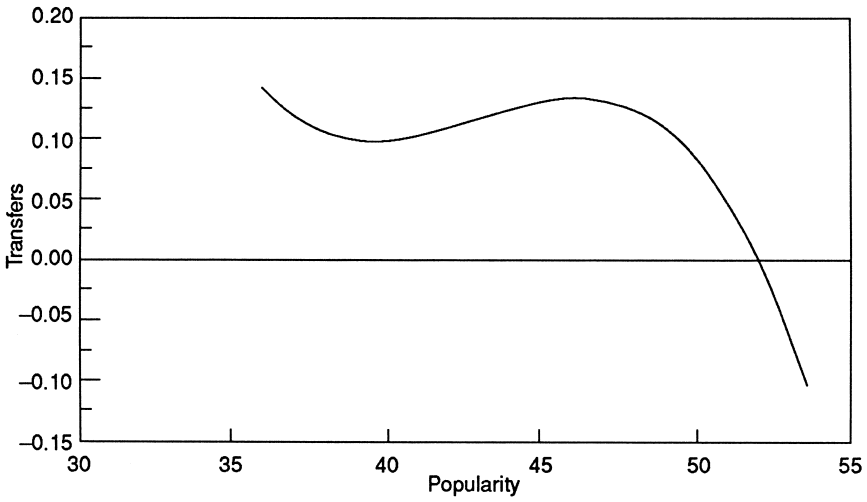
Notes: The dependent variable is Δtr_t. Seasonal dummies are not reported. $\bar{R}^2 = 0.522$; 4th order serial correlation: $F(4,110) = 0.33$; 8th order serial correlation: $F(8,106) = 0.54$.

Firstly, we have identified a cointegrating relationship here, as λ_0 has a large *t* ratio. The long-run relationship (long-run *t* ratios in parentheses) is given by

$$tr = constant + \underset{(4.72)}{0.888}\, gdp + \underset{(2.37)}{0.587}\, s\,gdp + \underset{(4.01)}{0.178}\, u.$$

This tells us that, prior to 1973, the elasticity of transfers with respect to income was 1.47. After the oil shock and the introduction of new monetary and financial disciplines in the 1970s, the elasticity fell to 0.888, a level insignificantly different from unity. Unemployment also has a well-defined effect. We see from the estimates of δ and δ^c

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Fig, 2. Popularity and transfers: election data

that Conservative governments tend to lower transfers after elections, compared with Labour administrations. There is a significant difference between the two (with a *t* ratio of -2.04).

At first sight, several of the interactive popularity terms are insignificant. However, as noted above, this is misleading. Testing the hypotheses that all the β^j are significant in each group, we find that for $j = 0, 3$, $\chi^2_4 = 18.18, 12.43, 3.46$ and 14.25 respectively. In other words, with the exception of the β^2, the groups are jointly highly significant. Moreover, if we remove the second- and third-order polynomial terms (imposing a linear specification as in Schultz), the restriction is strongly rejected; $\chi^2_8 = 17.96$.[22] So we do need the non-linear specification; linearity is strongly rejected. There may be some doubt about the use of a cubic, however. A cubic does impose some restrictions on the possible shapes we model. In particular, as popularity tends to infinity, transfers will also tend to infinity (the sign depending on the sign of the third-order term); but this is hardly a severe restriction as popularity is bounded.[23] Nevertheless, it is important to check that we are not being too restrictive. In fact, we are easily able to reject a fourth-order polynomial against the cubic (likelihood ratio test $\chi^2_4 = 3.712$). We have already established linearity is rejected against the cubic, but it could still be the case that the cubic is over-parameterized, so we also tested for a quadratic function. In this case we can reject the restrictions; the likelihood ratio test is $\chi^2_4 = 9.728$ (marginal significance 0.045).[24] It looks like the data is insisting on the cubic function.

[22] Note that we are able to get these significant results without recourse to the October 1974 dummy that Schultz uses. If we do include the dummy, our results are virtually unchanged. Schultz argues this was a 'desperation' dummy, but there may be an alternative explanation. In Britain, social security and other benefits are uprated once a year, in the spring; this largely explains the seasonality in the data. However, in the high-inflation years of the early to mid 1970s benefits were uprated twice a year. So the October 1974 effect may have no political significance.

[23] The number and position of any turning points in the cubic function $f(x)$ is determined by the solution to $f'(x) = 0$; $f''(x)$ is evidently a quadratic and may therefore have 0, 1 or 2 real solutions.

[24] Interestingly enough in the light of the summarized effects reported below, the quadratic takes a U (rather than inverted-U) shape.

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As an aid to interpretation of these rather complex results, Figure 2 shows the steady state impact (defined as $Z^* = \Sigma_{j=0}^{3}(\hat{\beta}_0^j + \hat{\beta}_1^j p + \hat{\beta}_2^j p^2 + \hat{\beta}_3^j p^3)$) over the range of p observed in elections in the sample. At high levels of popularity the pre-election boost in transfers falls. As popularity falls, the effect rises, then falls, as predicted by the theory set out above. However, as popularity falls further, the level of transfers starts to increase at a rapid rate, which we ascribe to the 'poisoned chalice' and managerial views set out above.[25]

Given that we have, inevitably, only a small set of elections in the sample, it seems prudent to examine the relationship under varying samples. We perform two such experiments. The first excludes the Heath re-election battle in 1974. Heath was at the low end of the popularity range (36 per cent in 1973q3) before the election. It could be that this episode accounts for the upturn in the low tail. However, this is not the case. Dummying out this period changes the detailed form of the relationship but not the low-popularity turn-up (plot not reported). The second experiment simply stops the sample at 1978ql, just before the 1979 pre-election effects begin to kick in. The rationale for this choice is that 1979 marked a watershed in British politics, with the election of Mrs Thatcher and the resurgence of third-party politics in the form of the Liberal–SDP alliance. The sample length in the first half numbers seventy-eight periods; in the second, sixty-seven. We lose three entire elections in this process, so if the equation survives, we may be fairly confident the results are robust. It does survive. The Hendry predictive failure test for the post-sample period is $F(67,47) = 1.083$ while the Chow test for parameter stability (a more sensitive test) is $F(31,83) = 1.058$. Both of these statistics are comfortably below the critical values. Concentrating on the interactive terms, the Chow test for the restriction that these twelve coefficients are constant is $F(12,102) = 1.36$ which again is below the critical value. Less formally but perhaps even more convincingly, a plot (not reported) of the non-linear relationship shows that the basic form is preserved, with a more pronounced lower tail but with the turning-points at roughly the same positions.

What we have found, then, is that a non-linear short-run relationship exists between real transfers (a non-stationary variable) and pre-election popularity levels. The relationship is statistically extremely well defined and robust to changing sample periods. The results are not fully consistent with the theoretical model set out above, for plausible reasons discussed there, but it seems clear that this is one area where non-linearity is an extremely important empirical issue. Despite this caveat, Schultz's key result is confirmed, even when proper account is taken of non-stationarity and non-linearity.

CONCLUSIONS

Schultz has emphasized an important interaction between popularity and electoral cycles which does, indeed, hold for UK data. However, his model ignores the trade-offs between costs and benefits of opportunistic policies for unpopular governments and imposes an invalid linear restriction. Moreover, his empirical work is flawed by an inadequate realization of the importance of cointegration. Nevertheless, Schultz's key

[25] It could be that the non-linearity could be estimated using a simpler form than the cubic. The figure has a roughly flat section and a steeper section, with the change at around popularity of 50. One way to capture this is with a spline function with the kink at 50. This works, in the sense that linearity is rejected against the spline alternative (likelihood ratio test $\chi_4^2 = 10.438$), but the R^2 falls to 0.506 from 0.522 in the cubic case. So we prefer the cubic again.

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proposition – that popularity has a strong effect, tempering the electoral cycle – is confirmed by the results discussed in this Note.

Party Competition and Local Spending Decisions

GEORGE A. BOYNE*

Party competition is central to the operation of representative democracy. Just as competition between firms in private markets is supposed to ensure the efficient provision of services required by consumers, so competition between parties delivers the policies desired by the electorate. As Elkins argues, party competition implies that governments 'will not be self perpetuating and that elections can, and in some cases do, lead to the replacement of one set of officials with another set. The chance, or probability, of turnover is perhaps the most salient feature of this system of accountability'.[1] If competition works then the ruling party is fearful of loss of office and seeks to produce policies that satisfy the electorate. Correspondingly, opposition parties will adopt a platform which is intended to be more popular than that of the incumbents. This, in essence, is the Downs model of party behaviour in a representative democracy: the struggle for electoral support leads rival parties to adopt 'moderate' policies that reflect median voter preferences.[2] In the absence of competition, the ruling party would be free to neglect public opinion and pursue 'extreme' policies in line with the views of its activists or financial backers.[3]

There is, however, little empirical evidence to suggest that party competition is important in practice. The first study to test the link between party competition and subnational policy variation was by Dawson and Robinson who found only a weak connection between the level of party competition and welfare policies in the American states.[4] Numerous studies have subsequently been conducted at the state and local levels in the United States, and a variety of measures of competition and policies have been tested, but the general conclusion remains the same.[5] Studies in Britain have also found little relationship between party competition and local policies (see below).

The aim of this Note is to challenge the validity of these results. The conceptualization of party competition in most of the empirical studies is flawed, and the measures of competition are weak. New evidence on the impact of party competition on local spending decisions is presented. This evidence is based upon more appropriate

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[1] D. Elkins, 'The Measurement of Party Competition', *American Political Science Review*, 68 (1974), 682–700, p. 682.

[2] A. Downs, *An Economic Theory of Democracy* (New York: Harper & Row, 1957).

[3] D. Robertson, *A Theory of Party Competition* (London: Wiley, 1976).

[4] R. Dawson and J. Robinson, 'Inter-Party Competition, Economic Variables and Welfare Spending in the American States', *Journal of Politics*, 25 (1963), 265–89.

[5] T. Holbrook and E. Van Dunk, 'Electoral Competition in the American States', *American Political Science Review*, 87 (1993), 955–62; J. Stonecash, 'Inter-Party Competition, Political Dialogue and Public Policy: A Critical Review', *Policy Studies Journal*, 16 (1987), 243–62.

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concepts and measures, and therefore provides a better basis for judging whether party competition in local government works as the model of representative democracy says it should.

THEORIES OF COMPETITIVE EFFECTS ON POLICIES

Political variables may have two types of effects on policy outputs. First, politics may have a separate and independent 'additive' effect on policies; secondly, the role of politics may be 'mediative' – that is, the relationship between other variables and policy outputs is modified by politics. This contrast between additive and mediative effects has usually been applied to the relationship between party control and policies,[6] but some studies have suggested that the effect of party control may itself be mediated by other political variables.[7]

What is lacking is a general theory that identifies whether political variables have additive or mediative effects. In particular, which type of variable is party competition? Can it have a separate additive effect on policies, or only mediate the impact of other variables?

A fairly simple criterion can be established for deciding whether a variable can have an additive effect or is limited to a mediative role. A motoring analogy may be helpful here: some variables are 'drivers' – they have a preference about direction and destination; other variables are 'vehicles' – they are mechanisms which can help or hinder the achievement of drivers' goals. Different vehicles will increase or restrict the miles travelled in a given direction, but a vehicle in itself has no preferences. Driver variables can have additive effects – they indicate policy preferences which stem from the values of the members of an organization. For example, it may be argued that the Labour party has an inherent bias towards high levels of public services, green pressure groups have an inbuilt disposition towards stronger environmental regulation, and bureaucrats have an innate urge for budget maximization or bureau shaping. Measures of such political variables can be expected to have an additive effect on policies because they reflect the preferences of organizations.

By contrast, political variables which do not reflect the values of organizations cannot have additive effects because there is no inherent bias towards one type of policy rather than another. These are the vehicles rather than the drivers – they reinforce or inhibit the relationship between other variables and policies. Party competition falls into this category. Measures of competition do not refer to organizations with members who have views about policies. Competition has no inherent bias towards any particular policies but instead facilitates or impedes the impact of party control on policy outputs. Strong competition can be expected to reduce the effect of party ideology on policies, while weak competition reinforces this effect. Thus, a Labour council faced by weak competition may be a high spender, while one faced by strong competition is only a moderate spender. Similarly, a Conservative council under little competitive threat may have low expenditure, but one which is confronted by a close rival may be nearer to the

[6] K. Hoggart, 'Does Politics Matter? Redistributive Policies in English Cities, 1949–74', *British Journal of Political Science*, 17 (1987), 359–84; G. Boyne, 'Politics, Unemployment and Local Economic Policies', *Urban Studies*, 24 (1988), 464–77.

[7] E. Carmines, 'The Mediating Influence of State Legislatures on the Linkage Between Interparty Competition and Welfare Policies', *American Political Science Review*, 48 (1974), 118–24; T. Karran, 'Borough Politics and County Government: Administrative Styles in the Old Structure', *Policy and Politics*, 10 (1982), 317–42.

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average for all councils. Competition is simply the vehicle, not the driver, and has only a mediative, not an additive effect. This conclusion on the appropriate conceptualization of party competition is important because most studies of party competition in the United States test only additive effects, which may partly explain the insignificance of their results. Weak competition is likely to be associated with higher spending in Democrat states but lower spending in Republican states.[8] If so, the two effects may cancel out and produce an insignificant coefficient for a measure of competition.

In sum, theoretical arguments on the role of political variables suggest that the effect of competition on policies is mediative not additive. Therefore, evidence from tests which examine the additive role of competition should be set aside, and further tests should focus on the mediative role of this variable.

MEASURES OF PARTY COMPETITION

The essence of competition is the probability of a change in control at the next election as *perceived by the ruling party*. If party leaders are unaware of a competitive threat, or discount its strength, then they are unlikely to modify their behaviour in an attempt to retain office. An ideal measure of competition, then, would consist of responses by incumbents to questions about their likely fate at the polls: do they feel entirely secure, or highly vulnerable? This approach to the measurement of competition is feasible for a contemporary snapshot of a small number of cases.[9] However, in dealing with policy variations across a large number of localities in various time periods, it is necessary to seek proxy measures of competition that reflect the structural conditions which may influence politicians' perceptions of their security in office.

One common measure of competition is the closeness of the result at the previous election.[10] However, the concept of 'closeness' is far from straightforward. First, should the success of the victor be measured in *votes* or *seats*? In systems with proportional representation the two measures are highly correlated, but where elections are settled by simple plurality there is likely to be a significant gap between the two.[11] Indeed, the winning party may not have received the highest number of votes. This suggests that 'seat share' rather than 'vote share' should be the starting point for measuring the vulnerability of the ruling party. Another issue in the measurement of the closeness of the outcome of the previous election is whether the ruling party's margin of victory should be gauged against *all* other parties or against only the *second* party. Elkins argues that it is necessary to know not just the share of the vote obtained by the winning party but also the division of the vote amongst the losers.[12]

The closeness of the previous election result does not in itself indicate the probability of change at the next election. It is also necessary to take the *volatility* of party strength in the local area into account. As Riley argues:

[8] E. Jennings, 'Competition, Constituencies and Welfare Policies in the American States', *American Political Science Review*, 73 (1979), 414–29.

[9] M. Stern, 'Measuring Inter-Party Competition: A Proposal and Test of a Method', *Journal of Politics*, 34 (1972), 889–904.

[10] H. Tucker, 'Inter-Party Competition in the American States One More Time', *American Politics Quarterly*, 10 (1982), 93–116.

[11] K. Strom, 'Inter-Party Competition in Advanced Democracies', *Journal of Theoretical Politics*, 1 (1989), 277–300.

[12] Elkins, 'The Measurement of Party Competition'; see also Strom, 'Inter-Party Competition in Advanced Democracies', and Holbrook and Van Dunk, 'Electoral Competition in the American States'.

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The fact that the winning candidates in state *X* usually get 55% of the vote could mean that the state has a more or less permanent minority of 45% of the electorate, or that the state's party identifiers are rather evenly split and there is a highly volatile set of 'independent voters' swinging from one side to the other. It seems clear that if (governmental) responsiveness relates to the possibility of defeat, these are different situations which could result in different attitudes and behaviours on the part of office seekers and holders.[13]

It is therefore necessary to measure changes in party strength in past elections in order to identify the level of competition in the present. Indicators of volatility include the proportion of previous contests won by the current ruling party and the aggregate net shift in proportions of seats held by all parties over a number of elections.[14]

A final issue in the measurement of competition concerns the identity of the rivals to the ruling party. Hicks and Swank examine the effect of opposition 'contagion' on the welfare policies of left, right and centre parties in eighteen capitalist democracies. They argue that 'while strategic interactions of partisan governments with their oppositions figure prominently in both political history and theory … influences of democratic oppositions upon government welfare legislation have been neglected in quantitative studies of welfare spending'.[15] Their results show that the expenditure policies of left governments are moderated by a strong opposition. Furthermore, the extent of this moderation depends on the ideological disposition of their main opponents: left governments faced by a strong centre party are higher spenders than left governments under threat from a right party.

Thus, an accurate test of the mediative effect of party competition requires measures which take into account the closeness of the most recent election, the volatility of results in previous elections, and the identity of the main challenger at the next election. The empirical analysis later in this Note follows these guidelines. First, however, the evidence and methods of previous tests of party competition in Britain are reviewed.

PREVIOUS TESTS OF PARTY COMPETITION IN ENGLAND AND WALES

The impact of party politics on local policy variation in the United Kingdom has been tested in over fifty studies. The evidence generally indicates that the ideological disposition of the ruling party is a significant influence on policy outputs.[16] The impact of party competition, by contrast, has been examined in only a handful of studies; and most of the evidence suggests that this variable has little relationship with policy decisions.

The additive effect of party competition has been tested in four studies.[17] It was argued above that there is no theoretical reason to expect an additive relationship between

[13] D. Riley, 'Party Competition and State Policy Making: The Need for a Re-examination', *Western Political Quarterly*, 24 (1971), 510–13, p. 513.

[14] Dawson and Robinson, 'Inter-Party Competition'; Strom 'Inter-Party Competition in Advanced Democracies'.

[15] A. Hicks and D. Swank, 'Politics, Institutions and Welfare Spending in Industrialised Democracies, 1960–82', *American Political Science Review*, 86 (1992), 658–74, p. 668.

[16] G. A. Boyne 'Assessing Party Effects on Local Policies: A Quarter Century of Progress or Eternal Recurrence?' *Political Studies*, 44 (1996), 232–52.

[17] J. Alt, 'Some Social and Political Correlates of County Borough Expenditures', *British Journal of Political Science*, 1 (1971), 49–62; J. Danziger, *Making Budgets* (London: Sage, 1978); Karran, 'Borough Politics and County Government'; K. Hoggart, 'Political Party Control and the Sale of Local Authority Dwellings, 1974–83', *Government and Policy*, 3 (1985), 464–74.

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TABLE 1 *Tests of Additive Effects of Party Competition on Local Policies in England and Wales**

Study	Authorities and time period	Measure of competition	Effect of competition
Alt, 1970	County Boroughs, 1958 to 1967	Based on Labour's seat share	Insignificant in 9 of 11 tests
Danziger, 1978	County Boroughs, 1960s	(a) Difference between seat share of first and second parties (b) Percentage of uncontested seats	Insignificant in 53 of 54 tests
Karran, 1982	County Councils, 1950 to 1971	Competition index based on Labour's seat share and percentage uncontested seats	Insignificant in most tests†
Hoggart, 1985	London Boroughs, Metropolitan Districts and Non-Metropolitan Districts, 1974 to 1983	Change of control from or to Labour	No significance tests, but small differences between competitive and uncompetitive councils

*Full references for the studies are given in fn. 17.
†Karran's presentation of the results prevents a more precise interpretation.

competition and policies. The results of the empirical studies support this view: almost all of the coefficients for measures of competition are insignificant (see Table 1).

Two studies have tested the mediative effect of party competition. First, Sharpe and Newton examine whether competition mediated the relationship between party control and expenditure levels in county boroughs and county councils between 1960 and 1972.[18] They divide councils into five groups: Conservative monopoly (more than 80 per cent of seats), Conservative dominant (60–80 per cent), two party (ruling party less than 60 per cent), Labour dominant and Labour monopoly (as equivalent Conservative categories). They find that spending rises consistently across these groups in all but four out of thirty cases. It therefore appears that party competition moderates the relationship between party ideology and expenditure levels.

However, there are several problems with this evidence. First, there are no controls for other explanatory variables such as central grants, the local tax base and service needs. Secondly, the level of competition in one year is tested against the current level of spending, which reflects decisions taken over a much longer period. A better test would be to examine the impact of competition on the relationship between party control and *changes* in spending. Sharpe and Newton do follow this procedure, but they combine Labour and Conservative councils together into monopoly, dominant and two-party

[18] L. J. Sharpe and K. Newton, *Does Politics Matter?* (Oxford: Clarendon, 1984).

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groups. They claim that 'there is an unmistakable trend in both county boroughs and counties for the increase (in spending) to be greater with increasing one party dominance'.[19] However, only one of their six cases fits this pattern, which is hardly surprising because the 'dominant' and 'monopoly' groups contain high-spending Labour councils and low-spending Conservative councils. A third and final problem with Sharpe and Newton's evidence is that no significance tests are used to assess the probability that the expenditure differences across the various groups of councils arose by chance.

A second analysis of the mediative role of competition is by Hoggart who provides evidence on the relationship between party competition and capital investment in housing and highways by fifty-seven county boroughs from 1966 to 1971.[20] He divides Labour and Conservative councils into two categories: a 'safe control' group where the ruling party had at least 60 per cent of the seats for four years or more from 1965 to 1970, and a 'marginal control' group where a party was in control for at least four years, but with less than 60 per cent of council seats. He argues that these categories

> make allowance for the marginality of control. The 60 per cent figure is arbitrary, but it is not unrealistic, for in these 57 cities between 1960 and 1970 parties which lost their majority following an annual election held an average of 55.95 per cent of seats in the year prior to the election. Using the 60 per cent figure is not a perfect mechanism, but it does provide a useful device for distinguishing party control on the basis of its safety.[21]

Hoggart includes a dummy variable for each category of Labour and Conservative control in regression equations which also contain measures of service needs and central grants. Only six of twenty-eight tests indicate that the impact of party control is moderated by competitive pressures. However, Hoggart's control categories are blurred because they refer to only four of the relevant six years. A council which was safe for the first four years may have been highly marginal for the last two; similarly, councils could have changed from marginal to very safe in the final two years. Thus the difference in competition between Hoggart's safe and marginal categories may be less clear than their labels imply.

In sum, evidence on the impact of party competition on local spending in England and Wales is unsatisfactory for several reasons. Four of the tests are based on an inappropriate additive conceptualization of competition. The two tests for the mediative impact of competition on the relationship between party control and spending are technically flawed in various ways. Moreover, the measure of competition in these mediative tests is simply the seat share of the ruling party. The level of volatility in previous council elections is not considered, and the potential importance of the ideological disposition of the main opposition party is ignored.

EMPIRICAL ANALYSIS

Context of the Statistical Test

The initial step towards a test of party competition in English local government is the identification of an appropriate set of councils and a suitable time-period. In order to give

[19] Sharpe and Newton, *Does Politics Matter?*, p. 203.

[20] K. Hoggart, 'Political Parties and Local Authority Capital Investment in English Cities, 1966–71', *Political Geography Quarterly*, 3 (1984), 5–32.

[21] Hoggart, 'Political Parties and Local Authority Capital Investment', p. 10.

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party competition a 'fair trial', it is necessary to avoid potentially confounding circumstances and to ensure sufficient variation across authorities in patterns of party control and competition. However, few parts of the English local government system have experienced 'normal politics' in recent years. All authorities have suffered massive financial upheaval in the 1990s as a result of reforms to local taxation which first replaced rates with the poll tax, then abolished the poll tax and introduced the council tax. These 'environmental shocks' may have disturbed the general relationship between political variables and spending, which could be used to explain away the insignificance of competition. Similarly, the financial behaviour of the London boroughs and metropolitan districts in the 1980s was affected by structural reorganization.[22] At this time these authorities may have been 'systems in disequilibrium' and the significance of competition (and other variables) could therefore be difficult to detect. The expenditure behaviour of the county councils was not affected by structural change in the 1980s, but these authorities are too few in number (thirty-nine) to allow robust statistical estimation of competitive effects in different party control contexts. A far larger dataset is provided by the 296 English non-metropolitan districts (ENMDs), but elections in around a third of these councils take place in three out of every four years. This is a problem because the level of competition changes annually, and the appropriate dependent variable would therefore be the annual change in spending. However, shifts in expenditure from year to year are subject to 'random' fluctuations which attenuate the significance of individual variables and reduce the explanatory power of statistical models of local policy variation.[23]

This leaves, by a process of elimination, the 194 ENMDs which have 'whole council' elections as the most promising context for the analysis of party competition. In the 1980s these councils were subject neither to structural change nor the chaos of local tax reform. The election of all council members once every four years also gives temporal stability in the pattern of party competition, which in turn means that the relationship between competition and the cumulative change in spending over a whole 'electoral cycle' can be estimated. The effect of short-term disturbances on expenditure change in single years should thereby be minimized. The ENMD dataset also contains considerable diversity in party control and competition. At the 1983 elections, twenty-nine of these councils were won by Labour and 105 by the Conservatives; thirty-one were dominated by Independents, and the Liberals, Social Democrats and Ratepayers held one council each. No single group controlled the remaining twenty-five authorities, which mostly comprised a mixture of independents, ratepayers and 'non-political' councillors.

Measures of Competition

Four variables are used to test whether competition mediated the relationship between party control and expenditure change from 1984/5 (the first budget set by the new councils in 1983) to 1987/8 (the last budget before the 1987 local elections). These variables reflect the measures of competition discussed above.

[22] The upper-tier councils in these areas, the Greater London Council and Metropolitan Counties, were abolished in 1986. Further structural and financial upheaval occurred in London in 1990 when the Inner London Education Authority was abolished and its responsibilities transferred to the boroughs.

[23] G. A. Boyne, *Constraints, Choice and Public Policies* (London: JAI Press, 1996).

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TABLE 2 *Distribution of Seat Shares in Labour and Conservative Councils*

	50–59%	60–69%	70–79%	80–89%	90%
Labour ($n = 29$)	13	4	5	6	1
Conservative ($n = 105$)	40	27	18	13	7

(*i*) *The percentage of total council seats held by the ruling party (SEATS)*
This is the most straightforward measure of competition which implies that councils with a small majority will moderate their ideological preferences, while those with a large majority will be freed from this constraint. Thus, in Labour authorities, this variable should be related positively to budgetary expansion; while in Conservative authorities it should be related negatively to increases in spending. Table 2 shows the distribution of seats held by Labour and the Conservatives in councils which they controlled. In each group the level of competition ranges from weak (where the ruling group holds more than 80 per cent of total seats) to strong (where the party in control has less than 59 per cent of the seats).

(*ii*) *The margin of victory of the ruling party over its nearest competitor (MARGIN)*
The logic of the hypothesis for this measure is similar to that for seat share: the greater the advantage of the ruling party over its nearest opponent, the lower the competitive threat and the less likely the incumbents are to 'moderate' their policies. Table 3 shows the distribution of the seat share gap between the first and second parties in Labour and Conservative councils. Levels of competition on this measure coincide closely but not completely with the previous measure. The correlation between SEATS and MARGIN is + 0.91 in Labour and + 0.87 in Conservative councils.

(*iii*) *The identity of the ruling party's nearest opponent (IDOPP)*
A Labour council may be especially likely to restrain its spending if its nearest competitor is the Conservative party; similarly, the Conservatives may be less likely to cut spending if their tenure is threatened by a strong Labour opposition. The Conservatives were the main source of competition in eighteen of the twenty-nine Labour controlled councils; and Labour was the main opposition party in forty-eight of the 105 Conservative councils. If the identity of the nearest competitor is important, then the margin of victory over this competitor should be a significant constraint on expenditure decisions.

(*iv*) *Changes in the seat share of the ruling party in previous elections (VOLATILITY)*
The hypothesis for this variable is that the behaviour of the ruling party is

TABLE 3 *Distribution of Margins of Victory in Labour and Conservative Councils*

	1–9%	10–19%	20–29%	30–39%	40–49%	50–59%	60% +
Labour($n = 29$)	6	2	5	2	3	5	6
Conservative ($n = 105$)	9	9	6	20	15	19	27

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influenced by the volatility of its past performance. In taking expenditure decisions in the period 1984 to 1987, politicians' perceptions of their security of tenure may have been shaped by changes in their seat share at previous elections. In order to tap this dimension of competition, the net change in seats held by the 1983 incumbents was measured at the elections in 1976, 1979 and 1983.[24] The 'political memory' of councillors may extend back beyond this period, but the first elections in the ENMDs were held only in 1973. Also, it may be argued that 'policy caution' is induced to a greater extent by seat losses than gains. However, it is equally plausible that previous movements in either direction represent a competitive threat: in local government a 'law of electoral gravity' may be that what goes up can come down. The volatility levels for Labour and Conservative controlled councils were very similar at 40 per cent and 38 per cent respectively of total seats, or around 13 per cent on average at each of the three elections. Thus both groups of councils should be equally subject to this competitive constraint.

Statistical Model

The competition variables are tested in the context of the following general model of expenditure change:

$$\text{EXPCH}_i = a + b_1\text{NEEDS}_i + b_2\text{BGR}_i + b_3\text{SGR}_i + b_4\text{TBASE}_i + b_5\text{OVERSP}_i + e_i$$

where i is an individual local authority, a is a constant, e is an error term, and EXPCH is the change in net expenditure per capita funded from central grants and local taxes.

NEEDS is the change in Grant Related Expenditure (GRE) per capita which is central government's assessment of local expenditure needs. This variable may contain two influences on spending. First, to the extent that GREs accurately reflect local circumstances, it indicates the relative increase in service needs across local areas. Secondly, the measure may reflect the influence of central guidelines on local expenditure change, whether or not such guidelines relate to real service needs.

BGR and SGR are the change in block and specific grants respectively. The hypothesis here is simply that authorities which are more generously funded by central government can more easily afford additional spending. Block grants were effectively lump-sum additions to local revenue, while most specific grants required 'matching' contributions from local revenue. Following the economic theory of grants, the impact on local spending should be greater for SGR than BGR.[25]

TBASE is the change in local rateable values per capita. Councils with a static or declining tax base are likely to find it more difficult to increase spending.

OVERSP is the extent to which authorities were 'overspending' in the base financial year, 1983/4, as indicated by the per capita difference between their net expenditure and GRE. Councils already above their GRE may have felt constrained to reduce their spending in order to minimize financial penalties or avert the threat of 'capping'; while those below GRE had an incentive to increase spending to this level in order to maximize grant receipts.

All the 'change' variables are measured as the cumulative difference across four financial years from 1984/5 to 1987/8. The expected signs for the coefficients on the

[24] An alternative measure would be the gross turnover of seats. However, it is likely that perceptions of the security of tenure of the ruling group are more influenced by the net change in total seats held, rather than losses or gains in individual constituencies.

[25] See G. A. Boyne, 'Central Grants and Local Policy Variation', *Public Administration*, 68 (1990), 207–33.

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TABLE 4 *Party Control and Local Expenditure Change in the English Non-Metropolitan Districts*

	Model 1	Model 2
NEEDS	0.75***	0.83***
BGR	− 0.07	− 0.07
SGR	1.57***	1.42***
TBASE	− 0.18	− 0.17
OVERSP	− 0.33***	− 0.27**
LABOUR	2.73***	
CONSERVATIVE		− 0.87**
$\underline{R}^2$	0.59***	0.54***
R^2	0.58	0.52

Notes: $n = 194$; unstandardized regression coefficients; Model 1: Coded Labour Control = 1; all other forms of control = 0; Model 2: Coded Conservative Control = 1; all other forms of control = 0. Significance levels: + = 0.10, * = 0.05, ** = 0.01, *** = 0.001.

explanatory variables are b_1, b_2, $b_4 > 0$; $b_3 > 1$; $b_5 < 0$. This model is estimated through an ordinary least squares (OLS) regression equation. Diagnostic checks revealed no serious violations of the assumptions of the OLS model.

Empirical Results

Before testing whether competition mediates the effect of party control, it is necessary to establish that differences in control are significantly linked to expenditure changes. Evidence on this issue is presented in Table 4 where dummy variables for Labour and Conservative control are added to the basic model of expenditure change. The results show that party effects are significant. Labour control was associated with additional spending of around £2.73 per head over the period 1984/5 to 1987/8; while Conservative control resulted in an expenditure cut of 87 pence per capita. These are not large figures in absolute terms, but they represent 12 per cent and 8 per cent respectively of the average change in spending by Labour and Conservative councils during this period.

The overall level of statistical explanation provided by the model is satisfactory – models of variation in expenditure change across subnational governments typically produce R^2s of 30–40 per cent.[26] A majority of the coefficients on the explanatory variables are consistent with theoretical expectations. Service needs and specific grants are positively related to spending, the coefficient on specific grants is significantly greater than unity and the level of 'overspending' at the start of the period has a negative effect on subsequent expenditure increases. The insignificant tax base effect is not consistent with the hypothesis for this variable. This may be because changes in the formal tax base do not accurately reflect the effective 'purchasing power' of the local population.

In general, then, the results of the model provide a fairly firm foundation for testing whether competition mediates the relationship between party control and expenditure change. This issue is investigated by applying the model to Conservative and Labour

[26] G. A. Boyne, 'Theory, Methodology and Results in Political Science: The Case of Output Studies', *British Journal of Political Science*, 15 (1985), 473–555.

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TABLE 5 *Mediative Effect of Competition on Relationship Between Party Control and Expenditure, Labour Councils*

	A	B	C	D	E
NEEDS	0.76+	0.77+	0.79+	0.79+	0.78+
BGR	−0.37	−0.37	−0.38	−0.36	−0.32
SGR	2.10***	2.07**	2.05***	2.08**	2.15***
TBASE	−0.50	−0.51	−0.53	−0.46	−0.36
OVERSP	−0.30+	−0.31+	−0.32+	−0.33+	−0.36+
SEATS		0.05			
MARGIN			0.07		
IDOPP				−0.03	
VOLATILITY					−0.08
Constant	10.72+	8.01	8.53	8.59	14.09+
R^2	0.55**	0.55**	0.56**	0.57**	0.57**
$\bar{R}^2$	0.46	0.43	0.45	0.42	0.45

Note: $n = 29$. See Table 4 for significance levels.

councils separately, and including each of the four competition variables discussed above.[27] The empirical evidence is shown in Tables 5 and 6. The results for the basic model are shown in column A in each table. The pattern in both the Labour and Conservative subgroups is consistent with that for the whole sample: the same variables are significant with the same signs and similar coefficients. The only significant difference between Labour and Conservative councils is in the effect of specific grants which is stronger under Labour control. This implies that Conservative councils are less likely to use specific grants to boost expenditure. Otherwise, Labour and Conservative councils respond in the same way to local and central constraints on their expenditure decisions.

The impact of the size of the ruling party's majority is shown in column B of Tables 5 and 6. The coefficients for this variable, SEATS, are in the anticipated direction – positive in Labour councils and negative in Conservative councils. However, neither coefficient is statistically significant at even the 10 per cent level, which suggests that the expenditure behaviour of ruling parties is not influenced by the size of their majority. Perhaps the relevant dimension of competition is not the percentage of seats held, but the margin of victory over the second party. The results for this variable, MARGIN, are shown in column C of Tables 5 and 6. Again, the coefficients have the expected signs, but their values are no greater than would be likely to occur by chance. If the margin of victory over second parties in general is unimportant, does the ideological disposition of the incumbents' nearest rival make a difference? Evidence on this hypothesis is presented in column D of the tables. The coefficients for IDOPP are both statistically insignificant, which suggests that the expenditure decisions of Labour councils are not affected by a strong Conservative opposition and that Conservative councils are unconcerned by the presence of a strong Labour rival.

[27] This is conceptually and statistically equivalent to pooling the Labour and Conservative subsets and entering interaction terms for control and competition. The presentation of separate results for each subgroup allows for a direct comparison of the slope coefficients for all explanatory variables in different party control contexts. In addition, separate estimation of the model in each subgroup avoids problems of collinearity between the basic party variables and interaction terms. For a discussion of these problems, see G. Wright, 'Linear Models for Evaluating Conditional Relationships', *American Journal of Political Science*, 20 (1976), 349–73.

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TABLE 6 *Mediative Effect of Competition on Relationship Between Party Control and Expenditure Change, Conservative Councils*

	A	B	C	D	E
NEEDS	0.84***	0.83***	0.82***	0.84***	0.84***
BGR	0.00	0.02	0.02	0.03	− 0.01
SGR	1.34***	1.28***	1.25***	1.27***	1.34***
TBASE	− 0.14	− 0.15	− 0.16	− 0.14	− 0.17
OVERSP	− 0.42***	− 0.42***	− 0.42***	− 0.43***	− 0.44***
SEATS		− 0.05			
MARGIN			− 0.04		
IDOPP				− 0.02	
VOLATILITY					− 0.06 +
Constant	4.13 3 +	7.53 +	6.61*	6.34*	6.50**
$\underline{R}^2$	0.55***	0.55***	0.55***	0.56***	0.56***
$\bar{R}^2$	0.52	0.52	0.53	0.53	0.54

Note: $n = 105$. See Table 4 for significance levels.

Finally, if the identity of the likely nearest competitor at the next election poses no special threat, does the volatility of the ruling party's seat share at previous elections matter? The statistical results in column E of Tables 5 and 6 suggest not. The addition of the VOLATILITY variable to the basic expenditure model makes no significant difference to the level of statistical explanation in Labour councils. The measure of volatility is significant at the 10 per cent level in Conservative councils, but it has the 'wrong' sign: the coefficient suggests that Conservative councils with a history of high volatility are *more* likely to cut spending. In other words, competition induces 'extremism' rather than 'moderation'.

Thus, none of the measures of competition has the expected impact on spending decisions in Labour or Conservative councils. Party competition did not mediate the relationship between party control and expenditure change in this group of local authorities. In order to search further for competitive effects, various combinations of the measures of competition were added to the basic model (for example, an interaction term containing SEATS and VOLATILITY). In addition, the model was tested in a subgroup of 'two-party' authorities in order to approximate as closely as possible the 'pure' version of the Downs theory. These attempts to save the competition hypothesis proved unsuccessful: the coefficients for the measures of competition remained insignificant.

Taken together, the results for party control and party competition support an ideological model of party behaviour rather than the median-voter model. Why is the relationship between party control and spending not influenced by the competitive conditions in local political systems? Why do competitive conditions not lead to competitive behaviour? The answers to these questions may be that local political leaders in Britain lack both the *opportunity* and the *incentive* to compete effectively.

Consider first the opportunity for parties to seek office by converging on local median voter preferences. Here it is important to note that the distribution of public opinion in local areas is not simply a microcosm of the national pattern. Some rural or suburban areas may be heavily 'anti-tax' while some urban areas are heavily 'pro-spending'. Effective party competition in these areas would require local politicians representing the major national parties to align their policies with local median voter preferences. However, in the United Kingdom local politicians lack the freedom to do this because

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they are tied to the 'image' of the national party. The policies adopted by national party leaders constrain the credible range of ideological positions that can be adopted by local party leaders. This range is unlikely to stretch to cover the position of the median voter in areas where local opinion is much further to the right or left than the national pattern. Local politicians may have some room for manoeuvre, but the local electorate's view of the ideological meaning of a party label is often shaped by messages from the national mass media. In such circumstances, effective competition between the two main national parties is blocked, and the dominant party may be free to neglect median voter preferences and pursue its own ideological preferences.

Even if local ruling parties in Britain had the freedom to compete, the balance of incentives and rewards would still be strongly towards ideology rather than office. Party leaders may realize that their policy decisions are, at best, a marginal influence on local electoral behaviour. If local elections are dominated by national rather than local issues then it is difficult for ruling parties to use policies to buy votes. In effect, there is a large number of 'floating' voters at local elections, whose behaviour depends on their view of the performance not of the local council but the national government. If a council is controlled by the same party as the national government, then it may lose office on an anti-government swing regardless of any attempt to abandon ideology and follow 'consensus' policies. In this case parties may as well follow their ideological preferences while they have the chance to do anything at all. Similarly, if a party in opposition at the national level is in control locally with a small majority, then it is likely to gain votes on the basis of an anti-government swing. Thus, such councils, too, have little to lose from policies that express their ideology. This course of action is a rational choice of a certain policy gain in the present over an uncertain electoral gain in the future.

CONCLUSION

Previous tests of the effect of party competition on subnational policy variation have generally produced insignificant results. However, these tests were conceptually and methodologically flawed. Empirical analyses assumed that the impact of competition is additive rather than mediative. Measures of competition concentrated only on the closeness of the outcome of the most recent election, while neglecting the volatility of previous election results and the ideological disposition of the incumbents' likely rival at the next election. The analysis in this Note remedied these deficiencies by testing the mediative effect of competition, and measuring several relevant dimensions of the concept. The results corroborate the findings of previous studies that party control is important, but party competition is not.

The structure of the argument in this Note has followed a familiar format: first, the existing empirical evidence in a field is criticized on conceptual and methodological grounds, then the explanatory variable of interest is retested using better methods and measures. The usual 'finale' to the show is that a significant rabbit emerges from the statistical hat. Unfortunately for the competition hypothesis, the trick did not work on this occasion. Party competition had no significant mediative effect on the relationship between party control and expenditure decisions. It remains to be seen whether the analytical approach adopted in this Note will produce different conclusions in other local government systems in other time periods. For the present, however, it appears that the conclusions of previous tests of competition were broadly valid, even if they were derived by inappropriate methods. In other words, the reasons were wrong, but the results were right.

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