

The Local Political Business Cycle

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Although local political leaders have fewer policy instruments available than national politicians, they nevertheless engage heavily in the creation of political business cycles, i.e. they try to locate and time the costs and benefits of government policies in such a way as to optimize voter support. The study, which is based on data from the four Nordic countries and Italy and France, shows that expenditures tend to grow faster the closer the local election, while political action to increase local taxes is generally taken only in mid-term years. If one wants to predict how local tax rates and expenditures change, it is as important to know the number of years to the next election as it is to know the change in the fiscal capabilities of local governments.

Among national political leaders it is probably an established fact that the fate of a political party at election day is highly dependent upon the performance of the national economy. The incumbent administration is likely to survive if the national economy is in a boom period while the party or parties in opposition will stand to gain if a black picture is painted by the national economic indicators. This common knowledge is likely to lead to *electoral economic* cycles or *political business* cycles¹ which are the result of deliberate efforts by the incumbent administration to locate and time the benefits and costs of government policies in such a way as to optimize voter support at elections.

The existence of electoral economic cycles found strong evidence in analyses in the 1970s (Nordhaus 1975; Tufte 1978; Whiteley 1980) but has been widely questioned in later studies (Paldam 1981; and Lewin 1988 for a critical assessment). Whatever the merits of the political business cycle theory on central government, few, if any, have ever tried out the theory in local politics. In local politics, political business cycles are possible although local political leaders are likely to be much more constrained in the choice of policy instruments than are national political figures.

The problem of political business cycles at the local level may be broken down into four related questions.

- (1) Do local political leaders have an incentive to create electoral economic cycles?

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The problem of political business cycles at the local level may be broken down into four related questions.

- (1) Do local political leaders have an incentive to create electoral economic cycles?

- (2) Can they do it, i.e. do they have the relevant policy instruments at their disposal?
- (3) Do they actually try to time changes in expenditures and revenues in such a way as to optimize electoral support at election day, that is do electoral economic cycles exist?
- (4) If electoral cycles do exist do they have any effect on the behaviour of voters at election day, i.e. are the perceptions of politicians about the behaviour of voters rooted in reality?

In this article we deal with the first three questions. The analyses are based on aggregate data from six countries on which we have information about local elections: Denmark, Norway, Sweden, Finland, France and Italy. The last question shall not be answered by means of a systematic data analysis since such an analysis will require city level data. However, it is briefly touched upon as part of a discussion of the incentives of local leaders.

The Incentives of Local Political Leaders

If political business cycles are facts of local political life then they must be caused by certain perceptions of reality of local political leaders. More specifically, politicians must operate on the basis of a model of the relationship between fiscal policies and the behaviour of voters which assume that:

- (1) Voter's perceptions of benefits and costs are based on short-term policy changes, i.e. the more recent a change has occurred, the more weight will be assigned to it in the calculation of the benefit/cost ratio.
- (2) The more favourable the ratio of perceived benefits to perceived costs, the more likely that a voter will vote for the party (or parties or persons) which can be held responsible for this ratio.²

The degree to which a political leader holds these beliefs combined with the wins and losses locally at stake determine his incentives to establish a political business cycle.

Variations in the local stakes cannot be accounted for in the present analysis. However, it is a plausible thesis that the stakes increase with increasing party competition.

More important is the question whether *local* political leaders have more or less reason to believe in the model described above than have politicians in *central* government, and if there are any differences to be expected as to the validity of the assumption *across* countries.

Party system	Electoral system	
	Prop. repr.	Simple majority
Strong party system		
Weak party system		

Fig. 1. Partisan and Electoral Systems.

The answer to these two questions depends on the characteristics of partisan and electoral systems (cf. Figure 1).

A strong party system, or partisanship, refers to 'the extent to which party organization permeates (national and) local politics from elections to the determination of policy' (Goldsmith 1988). A strong party system is thus indicated if national political parties have an organized structure that mirrors that of national, regional and local governments with district, municipal, country and national elements, if the local party branches have a monopoly or near monopoly when it comes to representation in city council and if the major lines of cleavages in local politics follow the party lines.

Empirically, *method of election* and *constituency* tend to combine into two types of electoral systems. In some countries we find at-large elections with proportional representation, while other countries have ward elections with simple majority. We suggest that local political leaders have few incentives to establish political business cycles in countries with strong party systems with at-large elections and proportional representation (cf. also Madsen 1980, 15). In contrast, we would expect local political leaders to have strong incentives to establish political business cycles in countries with weak party systems, ward elections and simply majority.

In the first type of system, there are very strong national forces at work in determining the electoral success of local political leaders. This is because election results are more likely to be a function of the success of the party at the national level. A landslide in a national election may have important consequences in the next local election. Newton (1974, 67) thus observed: 'What determines the election success of any given local party and its candidates is not their particular record in community politics but the record of their national party in national politics.'

This statement on English local government was made with reference to the party system. However, we would expect the party system to interact with the electoral system. In the second type of system mentioned above, politicians can be expected to be held personally responsible for public

policy. Their success at the polls is not a function of national politics. Rather they will be judged by the voter on their own merits.

The six countries investigated here all belong to the first category. Denmark, Norway, Sweden and Finland have similar (strong) party systems with at-large type elections held at regular intervals (3 or 4 years) giving each party a number of seats in proportion to the number of votes obtained. The party systems in France and Italy may also be described as strong, and although the method of selection is not generally based on proportional representation, particularly not in France, the two countries can probably be assigned to the same category, as the constituency covers the whole community in the local elections.

The particular features of the partisan and electoral systems in the six countries have important consequences for the conclusions which can be made. The analysis will exhibit a *bias against the existence of electoral economic cycles*. If we are able to detect such cycles we can therefore expect cycles to be also present in countries with other electoral and/or partisan systems, for instance Great Britain, the US and Canada.

Policy Instruments Available to Local Political Leaders

It would not make much difference if local politicians had the incentives but not the instruments to establish political business cycles. The fact that they are *local* politicians, i.e. acting in political systems which are the creatures of central governments, may represent a barrier to what they can actually do.

Let us first briefly make explicit the requirements of a 'good' policy instrument. It must be 'easy to start up quickly and must yield clear and immediate economic benefits to a large number of voters – or at least to some specific large groups of voters if the benefits are targeted as well as timed' (Tuftte 1978, 9). Such benefits can be created in principle via two different mechanisms.

First, a government can through its financial and monetary policies seek to influence aggregate demand in society. This will supposedly affect real disposable income and the number of unemployed, and thereby the economic well-being of individual voters. However, the economic condition of individuals may also be affected more directly through the distribution of government benefits (and costs in the form of taxes and other revenues). Such benefits may reach the individual in the form of *income transfers* or *services* produced by or under the responsibility of government institutions. The theoretical possibilities are depicted in Fig. 2

While all the routes in the diagram are, in principle, available to central

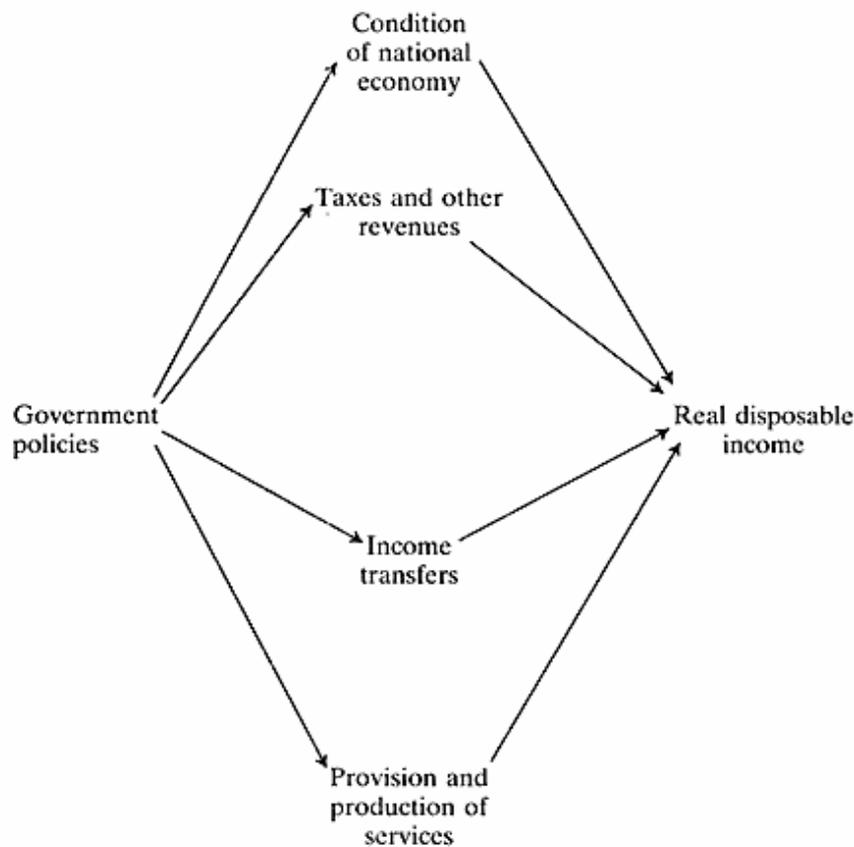


Fig. 2. Policy Instruments of Local Political Leaders.

governments this is only true for two of them when we talk about local government: via the size, distribution and form of revenues, and via the production of services, local political leaders can directly influence the real disposable income of individuals.

Clearly central government economic and financial policies represent only one set of determinants of the developments in national economies. Particularly in open economies governments may have very little influence on economic growth compared to private business and trends and conditions in the international economy. Also, in consideration of the high degree of uncertainty which surrounds macroeconomic policy-making and the disagreements within the economic discipline, there are certainly limits to the degree to which central governments are able to control developments in the national economy (for these limits cf. Tufte 1978, 138 ff.). Despite these constraints central governments do, however, have certain degrees of freedom in shaping the national economic cycle.

In local politics, where the link between policy-making and economic development is probably even more problematic, politicians can do very

little to influence growth in the local private sector, at least in the short term. In contrast to central policy makers, they cannot, for more than a short period, engage in deficit financing. Even if this route of action was available its effects on private economic growth would be almost impossible to delimit to the local community due to the extreme openness of local economies. In addition, local fiscal policy-making is highly constrained by the local economic situation as documented in hundreds of determinant/policy-output studies. In other words, local fiscal policy-making takes place in a context of a fiscal constraint which political leaders can do very little to influence.

On top of this comes the fact that most local governments rely heavily on grants from central government, another component of the fiscal constraint, which they cannot do much to control. This brings us to a major difference between the options available to central, as opposed to local, political leaders. Generally, local politicians must take the fiscal constraint as given since they live under a rule requiring a balanced budget. Although they have various means at their disposal they cannot, as central policy makers, decide to operate with a considerable budget deficit for an extensive number of years.

Returning to Fig. 2, we see another policy instrument which is not generally available to local politicians. In most Western countries, income transfers are to a very large extent controlled and paid for by central governments. When it comes to eligibility and the size of economic support, local governments can in fact decide very little. Thus, the income transfer option, *which in terms of visibility, timing and number of people reached is a very important instrument for central governments is simply not available to local political leaders.*

Left are two sets of instruments available to local politicians: the provision and production of services and the collection of revenues to pay for those services.

In most Western countries, the notion of local self-government is strongly related to the idea that localities have a right to set their own level of taxation. The rationales given by public finance theorists for local autonomy (or decentralization) rest on the argument that total welfare in society is likely to increase if localities are free to decide on service and taxation levels. In none of the countries investigated have local governments obtained complete freedom in deciding on the types and levels of revenues. It is, however, symptomatic, that they have some degree of freedom. Except for Norwegian local governments, which have lived for many years now with an effective limit on the rate of taxation, local governments in the five remaining countries have been able to decide more or less autonomously on the rate of taxation. Also it is a general condition of local

governments that fees and user charges are decided locally, albeit often within limits established by central government.

Finally, the category of 'other revenues', which in most countries is composed of income from new loans, interest and retirement on debt, interest on liquid assets and use of liquid assets can be manipulated in the short run. So, while it is true that local politicians are generally more constrained than central government leaders they are obviously able to control revenues *at the margins*, and this is what counts when it comes to establishing a political business cycle. In particular, the category 'other revenues' is important because it is through fluctuations in this category, that local politicians are able to time the flow of benefits and costs in such a way that benefits are distributed close to the election while costs are postponed to after the election.

The second set of policy instruments available to local governments is the provision and production of services. The growth of the welfare state is to a large extent equivalent to the growth of local governments. As more and more functions previously performed by families were taken over by the public sector, these functions tended to be assigned to local governments whether municipalities, counties and/or other types of government. So while local governments are short in options when it comes to their ability to influence disposable income via economic development and the distribution of income transfers, *the provision and production of services have a strong effect on a great many people's income*. It has, for instance, been estimated that approximately 50 percent of the electorate in a Danish municipality is *highly dependent* on municipal services either as a municipal employee (or as a spouse to an employee) or as a recipient of those services (Mouritzen & Narver 1986, 203). The high degree of consolidation at the local level found in most European countries thus gives political leaders tremendous opportunities to manipulate highly visible benefits which affect the daily living of a great many people. Furthermore, local leaders do not face the same implementation barriers as central government leaders often do. Policy-making normally rests on a thorough knowledge of the local conditions and implementation does not have to overcome 'policy inertia' and strong bureaucratic resistance.³ We, therefore, suggest that this fourth set of policy instruments, relatively as well as absolutely, is very effective in the hands of local political leaders.

Does the Political Business Cycle Exist in Local Politics?

If politicians operate on the basis of a model of the relationship between fiscal policies and the behaviour of voters as described above, we can

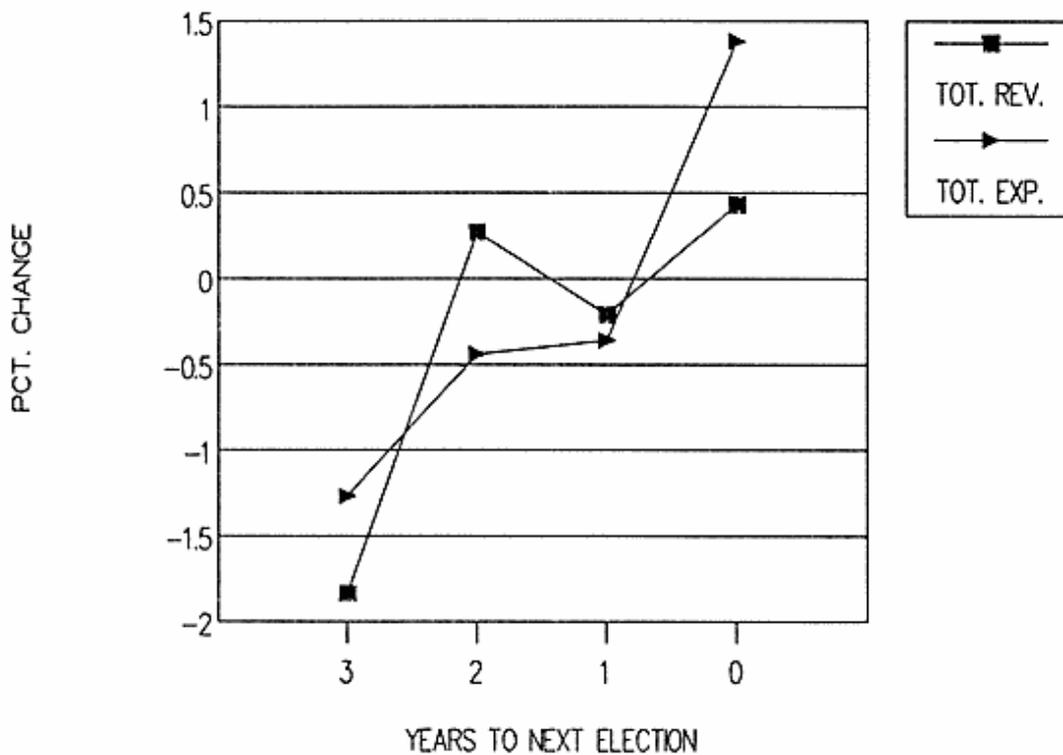


Fig. 3. Total Revenues and Expenditures.

hypothesize that in order to maximize electoral support, an incumbent political leader will seek to:

- (1) Incur as low costs as possible to as few people as possible near the election.
- (2) Distribute as many benefits as possible to as many people as possible near the election.
- (3) Incur the costs of these benefits as far away from the next election as possible.

Our test of the existence of electoral economic cycles is based on a number of fiscal time series which, for each country, show real yearly growth over the period 1978–86. In order to increase the number of observations we pool the data so that each year's change in each country is treated as a unit of analysis. The potential number of cases are thus 6 (countries) times 8 (yearly observations), 48, but due to missing values the actual number of observations is 36. The data and the calculations are described in more detail in the appendix.

The Electoral Cycle and Fiscal Policy-making

Figure 3 gives a first impression of the existence of a political business cycle.

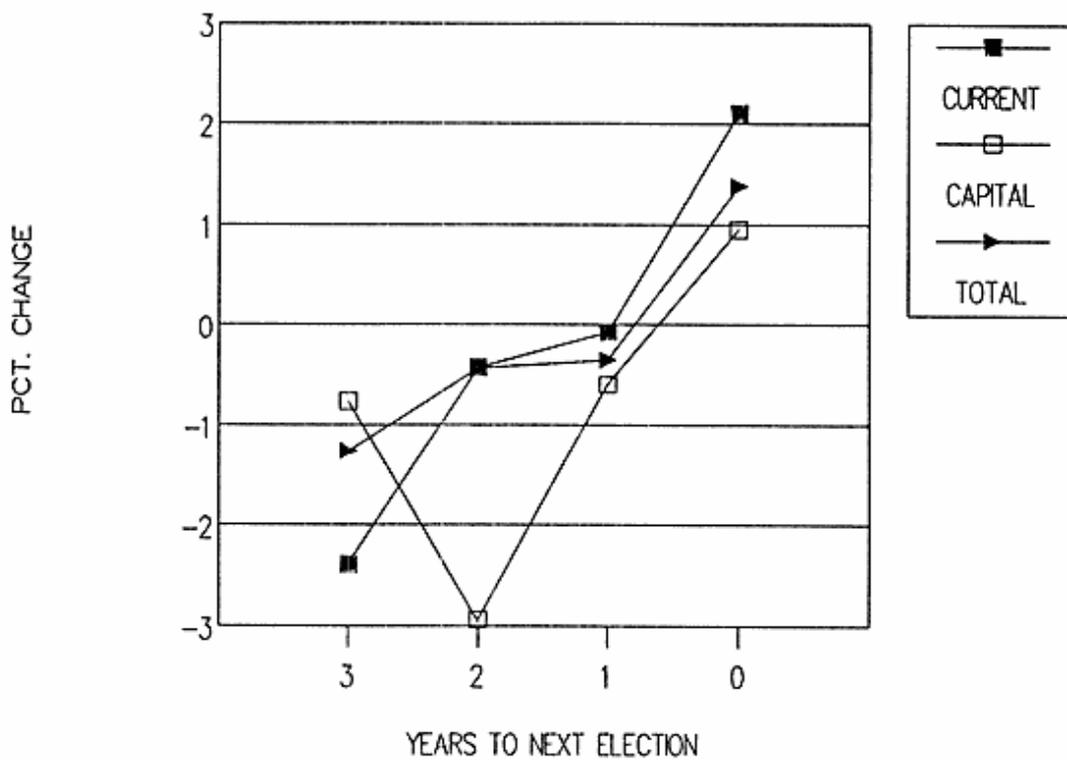


Fig. 4. Current and Capital Expenditures.

Along the horizontal axis we have depicted the number of years to the next local election. A value of zero in other words represents an election year while a value of 3 means that we are three years ahead of the next election (or one year after the last election). Along the vertical axis is shown the percent change in real terms *per capita* revenues/expenditures. In order to adjust for different trends in the six countries, the measures are standardized so that we see how changes differ from the average trends within the individual country (cf. the appendix on standardization). A value of zero shows that the change equals the average over the period as a whole, while a value 1.5 indicates that real growth is 1.5 percent above the normal.

The trends shown in the figure clearly show that local political leaders try to build political support close to the election as expenditure growth is larger the closer we come to election day. Also, we see that in the two years before election year local governments start to build financial capital (or, perhaps more to the point, seek to obtain revenues to pay for previous expenditure increases) as increases in revenues surpass increases and expenditures. What is surprising is the situation three years before the election where one would similarly expect politicians to increase their financial capital. But this is also equivalent to one year after the election, and the

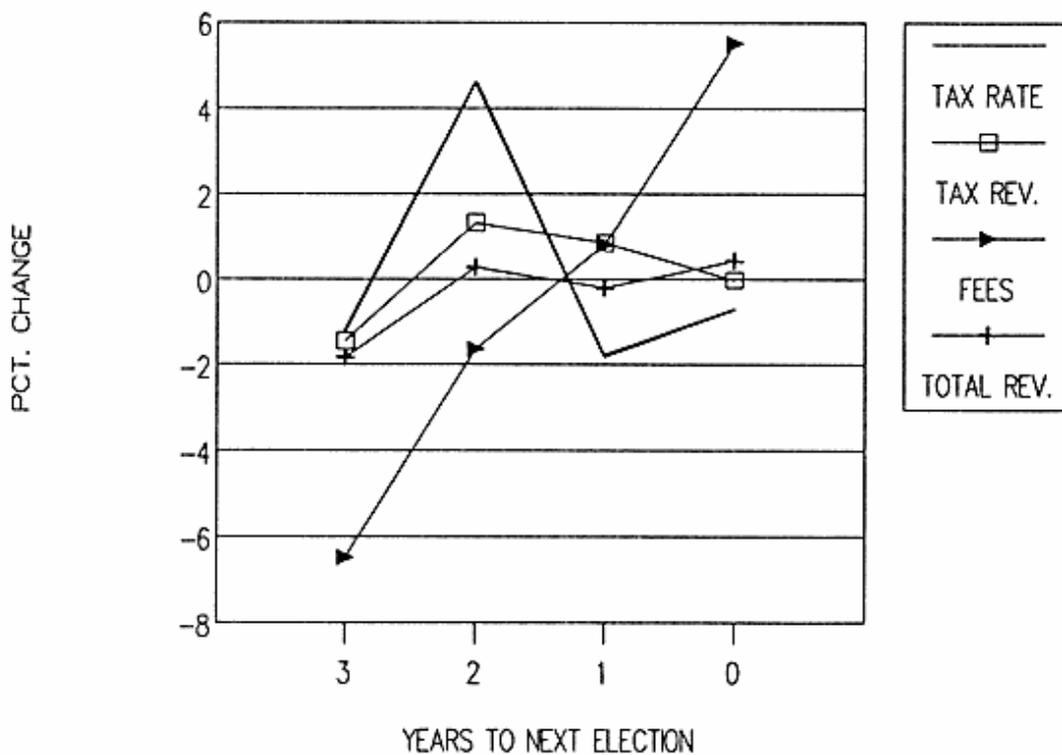


Fig. 5. Revenues.

fact that expenditures decrease more slowly than revenues can probably be attributed to promises made during the election campaign.

In Fig. 4 we break down total expenditures into current and capital. If we look at the election year and the year before the election year, current and capital expenditures tend to follow the same pattern. In the year before the election, we find expenditure changes close to the average, while expenditures tend to increase with from 1 to 2 percent more than the average during the election year. In the year following the election, the rate of change lies below the average, particularly for current expenditures. The low point for capital expenditures is found in the middle of the electoral cycle. The only reasonable explanation for this trend is the promises made during the election. Some of these promises cannot be fulfilled immediately as they will often require the establishment of capital, buildings, infrastructure, etc. Therefore, the rate of change cannot drop to the low point immediately after the election when we talk about capital expenditures.

The revenue side can also be broken down. Of particular interest is the timing of visible versus invisible revenues. In Fig. 5 we look mainly at the visible revenue sources, taxes and fees and charges. *The pattern of change for local taxes very clearly indicates a political business cycle.* The typical increase in the rate of local taxation in the *middle of an election period* is

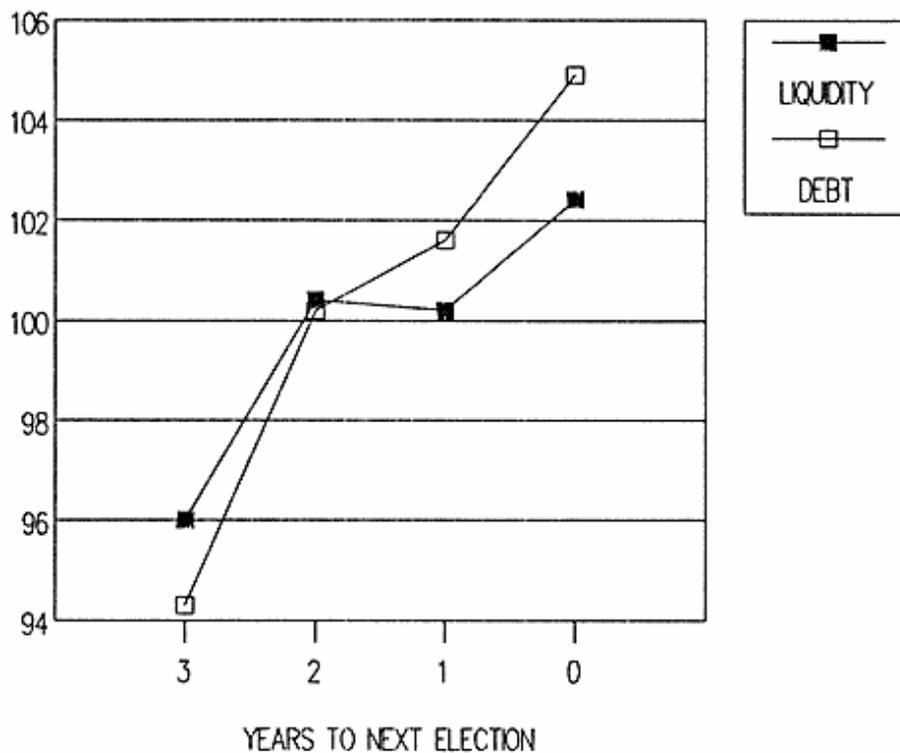


Fig. 6. Liquidity and Debt.

between 4 and 5 permille point, about half a percent point, above the average. In fact, what these standardized figures do not reveal is the fact that tax rates tend to *decrease* in year 1 and year 0 while they tend not to be changed in the year immediately after the election. In other words, *political action to increase local taxes is generally taken only in mid-term years.*

Fees and charges can also be considered a fairly visible revenue source for localities. What is surprising here is the very strong tendency for fees and charges to increase the closer we get to election day ($r = - .33$). This tendency cannot be explained by reference to fees and charges on municipal services, like day care, home help for elderly and similar services, because changes in these fees would be highly visible to a great number of people. Another large portion of fees and charges consists of payment for utilities like sewage, water, electricity, gas, etc. Although such payments are made by a great number of voters, they are probably less visible and are surrounded by an aura of fairness as the payments are made for necessary and visible services. It is therefore likely that local political leaders use this type of fees and charges as one means to survive during the period where expenditures increase faster than tax revenues.

Let us finally see how debt and liquid assets are built up and depreciated as a function of the electoral cycle. This is shown in Fig. 6.

In contrast to the previous figures the vertical axis depicts the stock of liquid assets and debt relative to the average over the whole period, which is set to 100. For both indicators there seems to be a more or less linear relationship so that liquid assets, as well as debt, are built up as the election is approaching ($r = -.32$ and $-.28$ respectively for all observations).

It was to be expected that liquid assets would increase the closer we come to the election. It could, however, be expected that political leaders would start to exploit the liquid assets in the election year, but that happens in the year after the election, where liquid assets tend to be reduced by approximately 10 percent on the average. The way local government debt develops as a function of the electoral cycle is very similar to developments in expenditures (cf. Fig. 3). However, it is difficult to explain how debt can be drastically reduced right after the election year.

One explanation of the trends in Fig. 6 may be that local political leaders 'over-insure'. They build up more liquid assets than are actually needed or used during the election year and then they are able to reduce debt right after the election, a strategy that makes sense from an economic point of view.

The Electoral Cycle and Growth in Public Spending and Taxation

Figure 4 showed how expenditures developed as a function of the electoral cycle. The relationship was more or less linear for current and total expenditures. If we use all 36 observations, the correlation between years to next election and change in current and total expenditures is $-.41$ and $-.28$ respectively. In order to test for spuriousness we introduce an additional variable, fiscal slack. It is a highly plausible thesis that expenditure changes will be a function of the development in fiscal conditions (on the slack measure see the appendix). From Table 1 we see that years to the next election in combination with fiscal slack can explain almost one third of the variation in changes in current expenditures. The two factors have considerably less explanatory power, however, when it comes to changes in total expenditures (R -square = $.14$). In both cases, *knowing the number of years to next election is almost as important as knowing how the fiscal constraint changes if one wants to predict how local governments will change their fiscal policies*. For each year we come closer to the next election current expenditures increase by 1.17 percent and total expenditures by 0.60 percent.

Previously, it was shown that taxes tended to increase only in the middle of election periods. In order to explain changes in tax rate, a dummy was constructed which has a value of 1 if the observation stems from a midterm year. *When it comes to changes in the rate of taxation, the electoral cycle is*

Table 1. Change in Expenditures and Tax Rates as a Function of Fiscal Slack and the Electoral Cycle.

	b	Beta	Sign.	R-square
Current exp.				.33
Slack	.49	.41	.01	
Next elect.	-1.17	-.34	.03	
Total exp.				.14
Slack	.24	.26	.13	
Next elect.	-.60	-.23	.17	
Tax rate				.24
Slack	-.04	-.21	.19	
Mid-term year	.53	.39	.02	

$N = 36$

even more important than changes in the degree of fiscal slack. While a 10 percent increase in degree of slack (a considerable increase) tends to lead to a decrease in the rate of taxation of 0.3 percent points, local governments increase taxes in mid-term years by more than half a percent point.

We can therefore conclude that the electoral cycle has a very strong impact on the dynamics of local government spending and taxation. When we focus on short-term changes, the electoral cycle may in fact be just important as the fiscal constraint under which local government must make their fiscal policies.

Are There Differences Between Countries?

The evidence presented so far is strong proof of the existence of a political business cycle in local politics. So much more convincing are the findings because the six countries were thought to exhibit a bias *against* the existence of an electoral economic cycle due to the partisan and electoral systems. It is a very difficult task to decide the degree to which political business cycles exist within each country. Although we now deal with very few cases we will nevertheless run the regression on current expenditures within each country.

In Norwegian local government we find no evidence of electoral economic cycles. In the appendix we present further evidence in support of this observation.

For Finland the data in Table 2 do not suggest cyclical fiscal policy-making. However, total expenditure is relatively strongly related to the electoral cycle in Finland, which suggests that business cycles are produced here via manipulations of capital expenditures.

Particularly France, Denmark and Sweden stand out as countries which definitely have electoral economic cycles in local politics. Although the

Table 2. Explaining Change in Current Expenditures in Six Countries (regression coefficients).

	Slack	Next elect.	R-square
Denmark	.75	-1.28	.27
Norway	.01	.04	.00
Sweden	.70	-.39	.78
Finland	.17	.08	.02
France	1.27	-1.46	1.00
Italy*			

* The model could not be tested for Italy due to a high degree of multicollinearity.

Table 3. Electoral Cycle and Change in Rate of Taxation.

	Corr.	Sign.	N
Denmark	.75	.02	8
Norway	.77	.02	8
Sweden	.56	.08	8
Finland	-.33	.24	7
France	.34	.26	6
Italy	.84	.01	6

The dependent variable is standardized change in the rate of taxation. Electoral cycle is measured as a dummy for mid-term years (cf. above).

model could not be tested for Italy, we would include Italy in this category of countries, as changes in current expenditures are clearly a function of the number of years to the next election ($r = -.88$).

How may these differences between countries be accounted for? One particular feature of the Norwegian system that comes to mind is the fact that local taxes are effectively controlled by central government. However, Norwegian local government clearly engages in political business cycling when it comes to taxes (cf. Table 3). For four countries, Denmark, Norway, Sweden and Italy, taxes are clearly a function of the electoral cycle, while for France the correlation is somewhat low. Finnish local government exhibits a rather atypical pattern as tax rates tend to *decrease in mid-term years*.

Conclusions

The findings of this study correspond to the findings of the early studies of political business cycles. Although mention was made of electoral promises, the results cannot generally be interpreted, as suggested by Paldam (1981,

300), in the light of 'boosts of ideological fervor generated by the election campaigns or . . . the promises which the competitive pressures during the campaign force the parties into making'.

Political business cycles exist in local politics. In local politics, perhaps even more than in national politics, there is a 'bias toward policies with immediate, highly visible benefits and deferred, hidden costs – myopic policies for myopic voters' (Tufte 1978, 143). Is that good or bad? In answering this question it is important to bear in mind that local politicians do not play around with national economies producing, for instance, long-run inflation. Neither are there any major redistributive effects of local political business cycles, as the income transfer strategy or the 'bribing of the low income voters' lie outside the range of what local political leaders can do.⁴

Do local political business cycles lead to higher public expenditures? There is no objective basis upon which to answer this question. It may be that fluctuations in expenditures and taxes simply are fluctuations around a more general trend which is not affected by local electoral politics. The problem in answering the question is, of course, that no one knows what the general or optimal trend is. But let us set up the following experiment: assume that a political leader knew the optimal (for society) long-term trend in expenditures and taxes. Let us further assume that he believes in the model about voter responses to changes in fiscal policies established previously. What would this imaginary politician do? He would do exactly as predicted by the political business theory! So optimal long-run fiscal policy-making does not logically collide with the short-run political interests of elected officials.

Are leaders more responsive? One of the effects of political business cycles or, more precisely, of the fact that political leaders believe in the business cycle model of voter behaviour, may well be that leaders are more responsive to changes in preferences and tastes, and particularly to new needs or demands which may arise in society.

Are voters bribed? If the model of voter response held by politicians is a true picture of reality, then voters are cheated into believing that benefits can be produced more cheaply than is actually the case. But political leaders cannot be blamed for the cognitive limits of voters. We will therefore have to accept political business cycles and small-scale bribery as one of the negative side effects of democracy, side effects which are rooted in the cognitive shortcomings of human beings.

What if leaders are wrong? What if voter behaviour is *not* affected by political business cycles? What if voters are rational in the Downsian sense (cf. above) or what if voting is a function of ideology, perceptions of the common interest, party identification, symbolic behaviour of leaders, etc. rather than actual policy-making? This is an unfortunate situation seen

from the perspective of political leaders since the actions they take are irrational and ineffective in terms of their own interests. But at this point we do not know if leaders are wrong. One of the interesting questions for comparative urban research is exactly the relationship between public policy and voter behaviour.

The electoral cycle is a very strong predictor of the fiscal (expenditure and revenue) policies of local governments. The study therefore gives a very strong, affirmative answer to the question: does politics matter? The answer to this question is more dubious when posed in the traditional context of the determinant literature, but this is exactly because this literature seems to overlook the fact that we focus on representative democratic systems in which politicians seek re-election. Although political business cycles may have some unfortunate side effects, they provide strong indications that political leaders are responsive to the preferences of their constituency. This is the result of 'politics'.

Technical Appendix

Data are from Mouritzen & Nielsen (1988). All change measures are calculated *per capita* and in real terms using the government final consumption deflator or special municipal cost deflator. The procedure is described in detail in the source.

The six countries were in quite different economic situations over the period. To take an example, current expenditures were increased by almost 35 percent in Norway from 1978 to 1986 while they rose by 10 percent in Italy. For other fiscal indicators like capital expenditures, debt and fees and charges variations were even greater. In order to control for these differences all variables were measured relative to the long-run trend. The most obvious way to do this would be to use ratios where changes for each year were divided by the average yearly change over the whole period. Because we use *change* measures and because the average could often be very close to zero this procedure was impossible. Instead the standardization was done simply by subtracting the average yearly change from the change in each year. As an example take current expenditures for Denmark where the average yearly growth rate was 2.6 percent. The growth rate from 1984 to 1985 (election year) was 4.3 percent. In this case the standardized score is calculated as $4.3 - 2.6 = 1.7$ percent.

The stock of liquid assets and debt were measured in relation to the 'normal' which was set to 100. Here we used ratio measures, i.e. liquid assets in a given year were divided by the average over the period.

Precisely because we deal with changes, some indicators may at times take extreme values which, due to the low number of observations, will

Table 5. Correlations between Changes in Expenditures and Years to Next Election.

	Current	Capital	Total
Denmark	-.11	-.42	-.23
Norway	.05	.12	.08
Sweden	-.56	-.09	-.51
Finland	-.04	-.68	-.31
France	-.63	.18	-.10
Italy	-.88	.63	-.74

All variables are standardized.

cycle is the relatively low variation between groups. The mechanism at work here is simply that total revenues tend to be relatively stable while the various revenue sources like taxes, fees and charges and loans, tend to fluctuate with the electoral cycle.

In order to support the interpretation of Table 5 and the evaluation of the degree to which political business cycles are found in each country simple correlation between the three measures of expenditures and years to the next election was calculated. The results are shown in Table 5.

The fiscal slack indicator measures the extent to which revenues with constant tax effort are able to keep pace with changes in expenditure needs and the rate of inflation. A score above 100 indicates a situation where a local government can increase service levels with a constant rate of taxation. A score below 100 shows that the government, if it chose to operate at a fixed level of taxation, was forced to cut real service levels. A score of 90 means, for example, that a local government has lost 10 percent of the revenues necessary to maintain the existing service and taxation level. Changes in the slack indicator from year to year are mainly a function of changes in the local tax base and/or changes in grants going to local government. The exact formula is found in Mouritzen & Nielsen (1988, 222).

NOTES

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 4. Cf. Tufte (1978, 145 and 149). This does not mean that redistributive effects of local service provision are absent. Such effects may well be present (even in the form of redistribution from poor to rich) but such effects are much more invisible when we talk about locally provided services.

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from the perspective of political leaders since the actions they take are irrational and ineffective in terms of their own interests. But at this point we do not know if leaders are wrong. One of the interesting questions for comparative urban research is exactly the relationship between public policy and voter behaviour.

The electoral cycle is a very strong predictor of the fiscal (expenditure and revenue) policies of local governments. The study therefore gives a very strong, affirmative answer to the question: does politics matter? The answer to this question is more dubious when posed in the traditional context of the determinant literature, but this is exactly because this literature seems to overlook the fact that we focus on representative democratic systems in which politicians seek re-election. Although political business cycles may have some unfortunate side effects, they provide strong indications that political leaders are responsive to the preferences of their constituency. This is the result of 'politics'.

Technical Appendix

Data are from Mouritzen & Nielsen (1988). All change measures are calculated *per capita* and in real terms using the government final consumption deflator or special municipal cost deflator. The procedure is described in detail in the source.

The six countries were in quite different economic situations over the period. To take an example, current expenditures were increased by almost 35 percent in Norway from 1978 to 1986 while they rose by 10 percent in Italy. For other fiscal indicators like capital expenditures, debt and fees and charges variations were even greater. In order to control for these differences all variables were measured relative to the long-run trend. The most obvious way to do this would be to use ratios where changes for each year were divided by the average yearly change over the whole period. Because we use *change* measures and because the average could often be very close to zero this procedure was impossible. Instead the standardization was done simply by subtracting the average yearly change from the change in each year. As an example take current expenditures for Denmark where the average yearly growth rate was 2.6 percent. The growth rate from 1984 to 1985 (election year) was 4.3 percent. In this case the standardized score is calculated as $4.3 - 2.6 = 1.7$ percent.

The stock of liquid assets and debt were measured in relation to the 'normal' which was set to 100. Here we used ratio measures, i.e. liquid assets in a given year were divided by the average over the period.

Precisely because we deal with changes, some indicators may at times take extreme values which, due to the low number of observations, will

Table 4. Relations between Selected Fiscal Variables and Years to Next Election.

	Sign. ana. of var.	Pearson Corr.	Sign.
Current expenditures	.09	-.41	.01
Capital expenditures	.84	-.11	.27
Total expenditures	.22	-.33	.03
Tax rate	.03	.14	.22
Tax revenues	.55	-.09	.30
Fees and charges	.29	-.33	.03
Liquidity	.69	-.32	.11
Debt	.48	-.28	.07

Number of observations differ.

distort the general trends. All the indicators used were therefore inspected for extreme values which were eventually coded as missing. This resulted in the exclusion of two observations from Italy on changes in tax revenues (1982-83 and 1983-84). In Denmark debt and liquidity underwent very great changes over the period which severely affected the general patterns found, particularly for debt where the correlation between years to next election and debt (standardized) is $-.08$ including Denmark and $-.28$ excluding Danish observations. It was decided *not* to include Danish observations on debt and liquidity.

In countries with a five-year electoral cycle (France and Italy) observations referring to 4 years before the election were coded as referring to 3 years before. In Sweden where the electoral period is 3 years there are no observations referring to 3 years before the election.

In figures there are no references made to the level of significance. The figures are based on the calculation of means within groups (analysis of variance). Also the simple correlations with years to next election were calculated. The corresponding significance levels are depicted in Table 4.

In most cases we find that the fiscal indicators exhibit a fairly significant relationship to years to the next election either as judged by the analysis of variance or by the simple correlation. Tax revenues and capital expenditures do not seem to be related at all to the electoral cycle.

Capital expenditures seemed to follow a cycle with a high point in the election year and a low point two years before the election. If we treat the year after the election the same way as the year before the election (assigned a score of 1) the correlation to change in capital expenditures increases to $-.16$ (sign = $.18$). The reason for the low level of significance, despite the seemingly strong relation between the two variables, is the great variation in changes in capital expenditures within groups.

The reason why total revenues are only weakly related to the electoral

Table 5. Correlations between Changes in Expenditures and Years to Next Election.

	Current	Capital	Total
Denmark	-.11	-.42	-.23
Norway	.05	.12	.08
Sweden	-.56	-.09	-.51
Finland	-.04	-.68	-.31
France	-.63	.18	-.10
Italy	-.88	.63	-.74

All variables are standardized.

cycle is the relatively low variation between groups. The mechanism at work here is simply that total revenues tend to be relatively stable while the various revenue sources like taxes, fees and charges and loans, tend to fluctuate with the electoral cycle.

In order to support the interpretation of Table 5 and the evaluation of the degree to which political business cycles are found in each country simple correlation between the three measures of expenditures and years to the next election was calculated. The results are shown in Table 5.

The fiscal slack indicator measures the extent to which revenues with constant tax effort are able to keep pace with changes in expenditure needs and the rate of inflation. A score above 100 indicates a situation where a local government can increase service levels with a constant rate of taxation. A score below 100 shows that the government, if it chose to operate at a fixed level of taxation, was forced to cut real service levels. A score of 90 means, for example, that a local government has lost 10 percent of the revenues necessary to maintain the existing service and taxation level. Changes in the slack indicator from year to year are mainly a function of changes in the local tax base and/or changes in grants going to local government. The exact formula is found in Mouritzen & Nielsen (1988, 222).

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