Symposium Articles

# Testing the 'Baobab Tree' Hypothesis: The Cumul des Mandats as a Way of Obtaining More Political Resources and Limiting Electoral Competition 

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#### Abstract

The aim of this paper is to test the 'baobab tree' hypothesis proposed by Yves Mény concerning French politicians. The rational 'baobab strategy' may be defined as the concentration of political resources and the deterrence of competition due to the possession of several elective offices simultaneously by a politician (the cumul des mandats). After a thorough investigation of the implications of the cumul des mandats in terms of entry barriers to the political process, I test some empirical assumptions. From an empirical study based on the 1993 French legislative elections, I carry out several tests in connection with the impact of the cumul des mandats on electoral campaign resources collected by the candidates and with the deterrence effect on competition. I demonstrate that candidates holding several local offices during the 1993 legislative campaign raised more money. I also show that the number of candidates and the quality of the opponents of the incumbent were lower when the incumbent held several local elected offices. French Politics (2006) 4, 269-291. doi:10.1057/palgrave.fp. 8200107


Keywords: cumul des mandats; financing campaign; political entry barriers; challenger quality

## Introduction

In his book La corruption de la République, Yves Mény (1992) provides an explanation of the widespread development among French politicians of holding several elective offices (cumul des mandats). This explanation is partly based on what he calls the 'baobab strategy', which can be described as the fact that the 'tree whose majesty forbids other plants from growing in its shadow' (Mény, 1992, 89). Indeed, simultaneously holding several elective offices ${ }^{1}$ enables a politician to concentrate resources and power in public decisionmaking (similar to the way in which the tree captures vital resources, especially
water). In return, these resources and power help the politician survive, that is, be elected, and deter the competition. Thus, the cumul des mandats, through the baobab strategy, appears to be a rational means of increasing the probability of (re-)election, and, as such, of lengthening the political career.

The aim of this paper is to test the validity of the two empirical implications of the baobab hypothesis. First, the money collected by a candidate has to increase with the increase in the number of elective offices s/he holds. Second, when an incumbent candidate holds several elective offices, the competition in the constituency has to be deterred. To test both hypotheses, I analyse the 1993 national legislative elections.

Using the campaign account data set, the econometric estimations show that the number of local elective offices held increases the money collected by the candidates. Concerning the impact of the cumul on competition, I show that the more elective offices the incumbent holds, the fewer candidates there are in his/her constituency. Finally, the analysis concludes that there is a decrease in the quality of the main challengers when the incumbent holds several other elective offices.

All of these results provide unambiguous evidence of the impact of the cumul des mandats on the French electoral process and validate the baobab hypothesis. The baobab strategy appears to be a good explanation of the rational strategy of multiple office-holding by French politicians.

The paper is organized as follows. The section that follows clarifies the definition of the baobab strategy, its implications and its application to the French political process. The following section presents the empirical tests of the baobab strategy. And finally, section four presents our conclusions.

## The 'Baobab Strategy' and Its Implications

On the basis of the analogy with the baobab tree proposed by Mény, the strategy of simultaneous multiple office-holding can be viewed as the means of setting up barriers to entry into the political process. Its application to the French political process makes it possible to provide some assumptions that can be tested empirically.

## The cumul des mandats as a barrier to entry

Owing to the fact that the spatial concentration of elective offices is a specificity of the French political process, it does not receive a lot of attention in international scholarly literature. ${ }^{2}$. The impact of the temporal concentration of elective offices, especially incumbent tenure, on electoral competition,
on the other hand, is more studied because this phenomenon is more frequent in other political processes.

The temporal concentration is often studied as an advantage of notoriety and reputation (Bernhardt and Ingberman, 1985), since the political capital of an incumbent is more significant than that of a new politician through a brandname effect (Lott, 1986; Yen et al., 1992). This advantage results in an electoral advantage, that is, in a higher probability of election (Lott, 1991). As new politicians have difficulties in bridging this gap, the temporal accumulation of elective mandates appears to be an entry barrier that deters competition (Lott, 1987, Coats and Dalton, 1992).

The spatial concentration of elective offices has similar effects on the political process, ${ }^{3}$ but the effects basically lie in the concentration of political resources. The barriers to entry induced by the cumul result from strategic actions of the politician, whereas the barriers resulting from the increase in notoriety or political competence are comparable to innocent barriers ${ }^{4}$ (Wolgemuth, 1999).

The politician who holds several elective offices at the same time can be compared to a baobab tree. In order to survive, the baobab tries to capture scarce natural resources, especially water, and to limit the development of competitors that could deprive it of part of these resources. As with the baobab, simultaneously holding multiple offices in a given geographical territory makes it possible to concentrate political and electoral resources and to deter the competition. This causes the appearance of barriers to entry into the electoral process. Thus, the cumul is a rational strategy to increase political survival.

Moreover, the barriers are reinforced by the indirect effect of the cumul on competition, much like the 'scare-off effect' highlighted by some studies of the American electoral process (Cox and Katz, 1996). An incumbent with good political quality may deter good challengers from running in the same constituency, because his probability of being elected is lower. Since the cumul des mandats induces a concentration of electoral resources, the good challenger may be dissuaded from running in the election against an incumbent who holds several offices. Three types of challengers can be deterred: the challenger belonging to the rival electoral coalition, one belonging to the same electoral coalition as the multiple office-holder, and one belonging to the same party as the multiple office-holder.

## The resources captured by the politician holding several elective offices

As for the incumbent's resources, ${ }^{5}$ several types of political resources captured by the multi-office-holder can be distinguished. First, each mandate held has a monetary counterpart. This income facilitates the allocation of time to political
activities and becoming a professional politician (François, 2003). A politician who allocates all of his/her time resources to political activities has an advantage on the politician for whom it is necessary to work. This explanatory factor of the cumul is all the more relevant as political incomes are low.

Secondly, the politician who holds several elective offices has several public budgets whose more or less discretionary variation can help him/her be elected to another elective office. For instance, in an opportunistic view of local political business cycles (Foucault and François, 2005a), a Mayor can manipulate municipal public spending in order to increase the probability of his/her election to the post of departmental councillor in an area that shares an electoral district with the town. The cumul offers opportunities to exercise power in allocating material and non-material public resources.

Third, each elective mandate has a discretionary budget that may be used for electoral goals. In other words, the cumul offers logistical support in electoral campaigns. For instance, a Mayor may use the communications budget of his/ her municipality to promote his electoral campaign for departmental councillor.

The fourth type of political resource is electoral. A candidate who holds several elective mandates can easily obtain campaign financing for several reasons. Given that $\mathrm{s} /$ he amasses public decision-making powers, donators expect higher returns on their donations. The higher yield of donations increases the money raised by the politician. Moreover, a candidate who holds several elective mandates has the advantage of notoriety, which can facilitate raising money. In contrast, a politician without elective office is deprived of these resources or at least has fewer resources. This limits the threat $\mathrm{s} / \mathrm{he}$ poses and reinforces the position of multiple office-holding politicians.

## The institutional conditions of multiple elective office-holding

Three institutional reasons may clarify the extent of the cumul. First, the law is rather permissive in spite of the fact that it was strengthened in 2001. Up until this date, the 1965 law applied and remains the first attempt at regulating these practices. ${ }^{6}$ The law stipulates that a parliamentary mandate (Deputy or Senator) can not be accumulated with more than two of the following mandates: Member of European Parliament, regional councillor, departmental councillor, Parisian councillor, Mayor of a municipality of 20,000 people or more, and Vice-Mayor of a municipality of more than 100,000 inhabitants. It should be noted that the mandate of municipal councillor was explicitly excluded from this list. As well, the accumulation of more than two mandates or elected functions listed above is forbidden if the person does not hold a parliamentary mandate. The law introduced as well the interdiction to
accumulate the posts of President of the departmental council and President of the regional council.

In 1993, politicians were authorized to simultaneously hold three elective offices. Moreover, a politician holding three offices who obtained a new mandate did not have to resign before the campaign, but only once elected. Thus, a politician holding three offices was able to run in an electoral campaign for a fourth mandate.

Second, a large number of elective offices exist, which is connected to the number of levels of local government (Table 1). Owing to the four levels of government in France and the European parliament, there are more than 500,000 elective offices in France.

At the local government level three groups of elective offices exist. The lowest level is the town, governed by the assembly, municipal council, which elects several mayoral assistants and the Mayor. The intermediary local government is the Department, or district ruled by an assembly, the general council, which elects several Vice-Presidents and the President of the council. The final local level is the regional district governed by the regional council, which elects several Vice-Presidents and the President. There are other levels of local government such as the structures that regroup several municipalities, but the members of these structures are not directly elected by the voters. This layering of local governments explains the high number of elective offices. And the French political process offers many opportunities to hold elective office.

Table 1 The French elective offices in 2000

| Type of office | Number |
| :---: | :---: |
| Municipal councillors | 505,916 |
| + Mayor | 36,545 |
| Departmental councillors | 3,818 |
| + President | 99 |
| Regional councillors | 1,683 |
| + President | 26 |
| National MP | 898 |
| + Députés | 577 |
| + Sénateurs | 321 |
| European MP | 87 |
| Overall | 512,402 |

[^0]
## Empirical hypotheses

From the preceding developments, we can deduce two main empirical hypotheses, since the concentration of political resources has two effects. The first hypothesis concerns the concentration of electoral resources made possible by the cumul, and the second deals with the deterring impact of the cumul des mandats on electoral competition.

The first consequence is connected to the assumption that the resources engaged into the campaign may help the election. ${ }^{7}$ This assumption is not treated in this study. ${ }^{8}$ But, I can deduce from it that the candidates seek to increase the amount of money collected regardless of the source. As the cumul allows a politician to obtain more resources, this induces an increase in campaign financing (Hypothesis 1). But, it is difficult to measure all of the resources described above; the empirical analysis must be based on electoral financing information that is more easily available because it is published.

Hypothesis 1 The more elective offices a candidate holds simultaneously, the more electoral resources s/he obtains.

The second hypothesis deals with the impact of the cumul des mandats on electoral competition. Focusing on the incumbent candidate, two hypotheses may be proposed depending on whether or not this candidate holds elective offices (Hypotheses 2a and 2b).

Hypothesis 2a The more elective offices an incumbent candidate holds simultaneously, the fewer the number of candidates who will run against him/ her in the election.

Hypothesis 2b The more elective offices an incumbent candidate holds simultaneously, the lesser the quality of his/her challengers.

The weakening of electoral competition can take two forms. Initially, it can be a quantitative reduction in competition resulting in a reduction in the number of competitors (Assumption 2a). Secondly, it can be a qualitative reduction in competition, resulting in the lesser quality of candidates (Hypothesis 2b).

## Empirical Analyses

The empirical test of the hypotheses proposed is based on the 1993 French national legislative elections. Using the published campaign financing accounts and data on the elective offices held by the candidates, three empirical hypotheses are successively tested.

## Presentation of the 1993 legislative elections

The 1993 legislative election is used because this is the last French national election in which corporate contributions were authorized, and this is the first legislative election in which campaign accounts were published. Indeed in 1995, the new campaign finance law prohibited firms from financing electoral campaigns and political parties, and implemented a public subsidy mechanism. In the 1993 election, the authorized sources of financing were the personal contributions of the candidate, the party contributions, voter contributions, corporate contributions and interest groups contributions. It should be noted that a ceiling of expenditures is set up by the constituency, but campaign contributions are not limited.

In addition, the 1993 election had another significant particularity. This election was characterized by the sizeable defeat of the left-wing incumbent majority. The intensification of the French electoral cycle ${ }^{9}$ with this election makes the use and the analysis of its results in terms of votes difficult. This is why I focus on the campaign and I assume the expectation of defeat has no disproportional incidence on campaign financing and on the decision of the incumbent to be a candidate.

Moreover, the regulation implies making some assumptions concerning the incumbent in the statistic description. In 1993, the law limited the cumul to three offices regardless of the type (local or national, legislative or executive). Thus, an incumbent deputy cannot hold more than two other offices. In order to correct the effect of the law in the statistical presentation, I consider the Member of Parliament as a local office. And I assume an incumbent could have an additional local elective office if he is not the incumbent or if the regulation does not limit possession to three offices. ${ }^{10}$ For instance, an incumbent who is Mayor of a city and departmental councillor holds three local offices. This assumption is not necessary for the econometric analysis.

The distribution of the 5,141 candidates taking part in the 1993 election illustrates that the majority of the candidates ( 61 per cent) do not hold local elective offices. ${ }^{11}$ This results from the increase in opportunistic candidates who run in the election in order to increase public subsidies to political parties (François, 2003). Including the MP as a local office, ${ }^{12} 19$ per cent of the candidates hold one local office, 14 per cent two local offices and 6 per cent three local offices. As a result, the average number of offices held equals 0.6 (Figure 1). But this number is higher for the candidates affiliated with the main political parties.

Finally, the most held local offices are linked to the municipalities (Figure 2): 14 per cent of the candidates are Mayors and 12 per cent are municipal councillors. We notice the frequencies of the councillors (municipal or departmental or regional) are very close, around 12 per cent. ${ }^{13}$


Figure 1 Average number of local elective offices held regarding the Partisan affiliation.
Note: due to the regulation of the cumul, I consider each incumbent holds an additional local elective office.
Source: Le Monde, special issue on the 1993 elections outcomes.


Figure 2 Elective offices held by the 1993 legislative candidates. Source: Le Monde, special issue on the 1993 elections outcomes.

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Since the number of Presidents of departmental or regional councils is low, the proportions of 1993 candidates holding these offices are also low. Focusing on the candidates holding at least one local elective office (Table 2), we observe the most frequent situation of cumul is the single holding of municipal councilman office. More generally, the most frequent situation implies the municipal offices.

Table 2 Details of the 1993 candidates' cumul des mandats

| Case of cumul des mandats | Frequency | \% of all candidates | \% of candidates holding local office |
| :---: | :---: | :---: | :---: |
| One office |  |  |  |
| Municipal c. | 379 | 7.37 | 19.34 |
| Vice-Mayor | 156 | 3.03 | 7.96 |
| Mayor | 295 | 5.74 | 15.05 |
| Departmental c. | 72 | 1.4 | 3.67 |
| Regional c. | 248 | 4.82 | 12.65 |
| Pt of departmental c. | 7 | 0.14 | 0.36 |
| Pt of regional c. | 4 | 0.08 | 0.2 |
| Two offices |  |  |  |
| Municipal c. and departmental c. | 88 | 1.71 | 4.49 |
| Municipal c. and Pt of departmental c. | 2 | 0.04 | 0.1 |
| Municipal c. and regional c. | 131 | 2.55 | 6.68 |
| Municipal c. and Pt of regional c. | 2 | 0.04 | 0.1 |
| Vice-Mayor and departmental c. | 47 | 0.91 | 2.4 |
| Vice-Mayor and Pt of departmental c. | 2 | 0.04 | 0.1 |
| Vice-Mayor and regional c. | 49 | 0.95 | 2.5 |
| Vice-Mayor and Pt of regional c. | 0 | 0 | 0 |
| Mayor and departmental c. | 272 | 5.29 | 13.88 |
| Mayor and Pt of departmental c. | 14 | 0.27 | 0.71 |
| Mayor and regional c. | 91 | 1.77 | 4.64 |
| Mayor and Pt of regional c. | 5 | 0.1 | 0.26 |
| Departmental c. and regional c. | 12 | 0.23 | 0.61 |
| Departmental c. and Pt of regional c . | 0 | 0 | 0 |
| Pt of departmental c. and regional c. | 0 | 0 | 0 |
| Three offices |  |  |  |
| Municipal c. and departmental c. and regional c. | 29 | 0.56 | 1.48 |
| Vice-Mayor and departmental c. and regional c. | 7 | 0.14 | 0.36 |
| Mayor and departmental c. and regional c. | 46 | 0.89 | 2.35 |
| Mayor and Pt of departmental c. and regional c. | 1 | 0.02 | 0.05 |
| Mayor and departmental c. and Pt of regional c. | 1 | 0.02 | 0.05 |
| Total | 1960 | 38.12 | 100 |

[^1]
## Cumul des mandats and electoral resources

In this first step, I seek to estimate the impact of multiple holding of local elective offices on the money raised by the candidates. Although the frequency of candidates falls with the increase in the number of offices held, average monetary resources grow with the number of elective mandates held (Table 3).

I try to estimate the amount of money obtained by the 5,141 candidates running in the 1993 legislative elections in 555 constituencies. ${ }^{14}$ The contributions are expressed per registered voter. The estimation is based on two sets of explanatory variables characterizing the candidates and the constituencies.

Given the aim of this study, the two most important independent variables deal with the cumul. The first is the number of local elective offices held by the candidate, whose discrete value is included between 0 and 3 . The second is the average number of local elective offices held by the other candidates running in the constituency. Whatever the campaign contributions, I expect the cumul of the candidate to have a positive effect on the money raised, and the average cumul of the opponents to have a negative impact.

Moreover, I include several control variables of the determinant of the contributions. ${ }^{15}$ Concerning the constituency, I take into account the intensity of the competition by means of the total expenditure in the constituency undertaken by the other candidates. The wealth effect of the constituency is indicated by the value of the regional area GDP. ${ }^{16}$ The effect of both variables is expected to be positive, because the more competitive or the wealthier constituency has to induce a higher amount of money collected. Concerning the candidates, they are first characterized by their party affiliation according to the 12 categories of Partisan distinction. Secondly, to control for the effect of notoriety, of seniority, of holding of national offices, and of belonging to the

Table 3 Electoral funding and holding of local elective multi-offices

|  | Number of offices held |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | Overall |
| Funding by cand. |  |  |  |  |  |
| $(F F)$ | 140,197 | 294,237 | 354,659 | 115,824 |  |
| Mean | 45,043 | 145,911 | 200,554 | 188,134 | 160,630 |
| s.d. | 71,989 |  |  |  |  |

[^2]national majority, I introduce six dummy variables. I distinguish the incumbent candidate, the former member of the parliament, ${ }^{17}$ the Member of the European Parliament, the member of the Senate (the upper house of French Parliament), and the Incumbent Minister and Vice-Minister of the national Cabinet. The results are given in Table 4.

As expected, the cumul has a positive impact on the receipts. To hold an additional local office induces an increase of 0.5 FF per registered voter. It corresponds to $33,700 \mathrm{FF}$ in overall resources. This result is all the more robust in that the coefficient is not affected by the inclusion of the unobservable effects by constituency or by the omission of one of the other explanatory

Table 4 Estimation of campaign finance resources
OLS method; $N=5,141$
Dep. var.: Financing by registered elector
Adj. $R^{2}=0.63 / F(23,5117)=373.9$
Indep. var.

| Constituency characteristics |  |
| :--- | :---: |
| Spending in the constituency (excluding the candidate) | $2.71 \mathrm{E}-07^{* * *}(3.91)$ |
| GDP of the area | $1.56 \mathrm{E}-06^{* * *}(7.47)$ |
|  |  |
| Cumul des mandates | $-0.352^{* * *}(-3.45)$ |
| Average multi-holding of other candidates | $0.495^{* * *}(14.27)$ |
| Number of local offices held by the candidate |  |
| Candidate's characteristics | $2.937^{* * *}(8.18)$ |
| Minister | $2.799^{* * *}(5.9)$ |
| Vice-Minister | $0.821^{* * *}(3.27)$ |
| Member of the European Parliament | $1.512^{* *}(2.2)$ |
| Member of the Sénat | $1.904^{* * *}(21.29)$ |
| Incumbent | $0.927^{* * *}(6.16)$ |
| Former MP | $0.002^{*}(0.02)$ |
| Intercept |  |

Thirteen dummies indicated the party of the candidate (Extreme left, Regionalists, Communist Party (PCF), Socialist Party (PS), Miscellaneous left, Greens, Environmentalists (GE), Left Radicals (MRG), Miscellaneous right, Rassemblement pour la République (RPR), Union for French Democracy (UDF), National Front (FN), Extreme right) are also introduced but not reported. The completed result can be obtained by request: abel.francois@enst.fr.
Shapiro-Francia test for normal residuals: $z=4.082$ with $P<0.001$.
Shapiro-Wilk test for normal residuals: $z=9.451$ with $P<0.001$.
Breusch-Pagan/Cook-Weisberg test for heteroscedasticity: $\chi^{2}(1)=5,147$ with $P<0.001$.
The $t$-ratios are given between parentheses.
***Coefficient is statistically significant at the 1 per cent level.
**Coefficient is statistically significant at the 5 per cent level.
*Coefficient is statistically significant at the 10 per cent level.

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variables dealing with the candidate's characteristics. Thus, we can conclude the cumul des mandats induces an increase in electoral resources.

As well, this result can be refined by considering the different cases of cumul. If one introduces in the same regression the forms of cumul instead of the number of mandates, a number of observations can be carried out (Figure 3).

Firstly, it appears that the situations that induce the strongest increases in resources are, respectively: (1) municipal councilman and President of departmental council; (2) Mayor and President of regional council; (3) municipal councilman and President of departmental council; (4) Vice-Mayor and President of departmental council; (5) President of regional council; (6) Mayor; (7) Vice-Mayor and departmental councillor or regional councillor and departmental councillor; (9) Vice-Mayor and departmental councillor and regional councillor; (10) Mayor and departmental councillor; and (11) Mayor and regional councillor.

It follows that the possession of local executives such as Mayor, President of the departmental council leads to an increase of campaign contributions. This reinforces the hypothesis on electoral resources as a good indicator of total political resources assembled by politicians that hold multiple mandates. In addition, the impact is higher for situations in which the candidate simultaneously holds two local elective mandates. This leads one to suppose


Figure 3 Detailed impacts of cumul des mandats on campaign financing. c, councillor, and Pt , President. The coefficients are given by the previous estimation using 23 dummy variables instead of the number of local offices held. The variables where the coefficient is not statistically significant at the 10 per cent level are not reported. The completed result can be obtained by request: abel.francois@enst.fr.
that the number of mandates does not have a linear impact on the resources obtained but waxing and then waning impact.

Moreover, we note the average number of local offices held by the opponents of a candidate has a negative effect on the money raised. This impact is significant whatever the measure: the average number of mandates per candidate (coefficient of -0.35 with a standard error of -3.45 ) or the total number of local mandates held by opponents (coefficient of -0.025 with a standard error of -2.11 ). Thus, in addition to the direct impact on resources, the cumul has an indirect impact on the competitors' resources. This is the first result concerning the incidence of the cumul on electoral competition dealt with in the next section.

## Cumul des mandats and electoral competition

The last two hypotheses deal with the impact of the cumul des mandats on competition. In order to test them, the empirical analysis focuses on incumbent candidates. Among the 555 constituencies, 474 have an incumbent candidate. ${ }^{18}$ To measure the competition in these constituencies, I use two indicators: the number of candidates is a quantitative indicator and the quality of the challengers opposing the incumbent is a more qualitative measure.

## Cumul des mandats and quantity of candidates

At first, it appears that the number of candidates in competition in the 474 studied constituencies falls when the number of local mandates held by the incumbent candidate increases (Table 5). The minimum number of candidates is 5 , and the maximum is 17 .

If we distinguish the political affiliation of the incumbent and/or of the other candidates, we note the same pattern, except for the right incumbents and the right candidates. The average number of candidates decreases when the number of office held by the incumbent increases.

In order to better judge the quantitative impact of multiple office-holding on electoral competition, an econometric estimate is carried out. I seek to explain the number of candidates taking part in the 474 constituencies that have an incumbent candidate. According to the literature on electoral competition, five explanatory variables are selected. The first is the number of local mandates held by the outgoing candidate. The expected sign of coefficient of this variable is obviously negative.

The four other variables are control variables. The first is the incumbent's margin of victory in 1988 (the previous election). ${ }^{19}$ It is expected that the greater this margin is, the more the potential candidates are discouraged from to taking part in the election (Green and Krasno, 1988a).

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Table 5 Number of local elective offices held by the incumbent and the average number of candidates

|  | Number of offices held |  |  |  |  |
| :--- | ---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | Overall |
| Overall incumbents |  |  |  |  |  |
| Number of constituency | 1 | 37 | 236 | 200 | 474 |
| Number of candidates | 10 | 9.78 | 9.37 | 8.88 | 9.19 |
| Number of left candidates | 5 | 4.84 | 4.42 | 4.12 | 4.33 |
| Number of right candidates | 3 | 3.30 | 3.22 | 3.17 | 3.20 |
|  |  |  |  |  |  |
| Left incumbents |  |  |  | 86 | 243 |
| Number of constituency | 1 | 24 | 132 | 8.95 | 9.49 |
| Number of candidates | 10 | 10.25 | 9.7 | 4.17 | 4.51 |
| Number of left candidates | 5 | 5.17 | 4.60 | 3.14 | 3.27 |
| Number of right candidates | 3 | 3.42 | 3.32 |  |  |
|  |  |  |  | 114 | 231 |
| Right incumbents |  |  |  |  | 8.82 |
| Number of constituency | 0 | 1 | 104 | 8.95 | 8.82 |
| Number of candidates | - | 8.92 | 4.20 | 4.09 | 4.15 |
| Number of left candidates | - | 4.23 | 4.20 | 3.14 |  |
| Number of right candidates | - | 3.08 | 3.08 | 3.20 |  |

Note: Owing to the regulation of the cumul, I consider each incumbent deputy holds an additional local elective office

The second variable is the party of the incumbent candidate in order to take into account the French electoral cycles. One can expect that the districts in which the incumbent candidate belongs to the incumbent majority attract more candidacies than other constituencies.

The third control variable is a set of the incumbent's characteristics. This is the amount of money raised by the incumbent to finance his campaign. According to the extensive literature dealing with the informative signal of the money raised (e.g. Epstein and Zemsky, 1995) and with the strategic use of spending to deter challengers (Goldenberg et al., 1986), we can assume this amount may be viewed as a signal to potential candidates. The more money the incumbent candidate obtains, regardless of its source, the more he will discourage other candidacies.

The fourth variable indicates if the incumbent is Minister or Vice-Minister. The expected impact is a priori ambiguous. Indeed on the one hand, the effects of notoriety associated with belonging to the national Cabinet can deter competitors (negative impact). But, on the other hand, the more important media coverage of constituencies in which a Minister is running can incite political parties to place a candidate in order to increase their media exposure.

The results of the estimation are rather conclusive (Table 6). The number of local offices held by the incumbent candidate negatively influences the number of candidacies in the constituency. Thus, an additional local office results in a reduction of 0.3 in the number of competitors. The cumul des mandats by the incumbent thus limits quantitatively the competition faced by the incumbent in the re-election campaign. This result seems to be robust since the omission of the total spending does not have any impact on the coefficient that equals -0.324 with a standard error of -1.99 . Additionally, the relation is linear as the two variables of the number of mandates and its square are not simultaneously significant, as with the $\log$ of the number of local mandates.

As before, it is possible to detail the results. Only eight situations of the cumul on the candidate's part have a significant effect (Figure 4).

As with the resources, local executive mandates have the highest impact on the number of candidates, but the most important executive positions are those linked to the Presidencies of the Departmental and regional councils. At most,

Table 6 Estimation of the number of candidates
OLS method; $N=474$
Dep. var.: Number of candidates
Adj. $R^{2}=0.15 / \mathrm{F}(12,461)=8.02$
Indep. var.

| Number of local offices held by the incumbent | $-0.336^{* *}(-2.2)$ |
| :--- | :---: |
| Member of the European parliament | $1.052(1.17)$ |
| Minister or Vice-Minister | $-0.22(-0.51)$ |
| Margin in 1988 | $0.003(0.37)$ |
| Total receipt per registered voter | $0.223^{* * *}(7.74)$ |


| Party of the incumbent |  |
| :--- | :---: |
| National Front (FN) | $0.967(0.44)$ |
| Miscellaneous left | $-2.043(-1.44)$ |
| Left Radicals (MRG) | $-0.852(-0.69)$ |
| Communist Party (PCF) | $-0.604(-0.56)$ |
| Socialist Party (PS) | $-0.939(-0.93)$ |
| Rassemblement pour la République (RPR) | $-1.788^{*}(-1.77)$ |
| Union for French Democracy (UDF) | $-2.127^{* *}(-2.1)$ |

Intercept $\quad 9.724^{* * *}(9.25)$

[^3]

Figure 4 Detailed impacts of cumul des mandats of the incumbent on the number of candidates. c, councillor, and Pt, President. Only the eight significant coefficients (at least at the 10 per cent level) are presented. The coefficients are given by the previous estimation using 21 dummy variables instead of the number of local offices held by the incumbent. The completed result can be obtained by request: abel.francois@enst.fr.
a situation of cumul induces the decrease in three candidacies while at least it leads to the reduction of a little more than one candidacy. Compared to the average number of nine candidacies, it can be concluded that the impact of the cumul is far from insignificant on the quantitative measure of competition.

We also note that, contrary to what was expected, the margin of victory in the previous election does not impact the number of candidates. This result can be explained by the margin measure used that does not distinguish the election at the first and at the second round. If we introduce simultaneously the margin, either the incumbent was elected at the first round or he was at the second, both coefficients are not significant. But a simple dummy indicating the election of the incumbent at the first round in 1988 has a negative and significant impact on the number of candidate.

Moreover, the fact that the incumbent candidate is a Minister also does not have incidence.

## Cumul des mandats and quality of candidates

The principal problem in testing the impact of the multi-office holding of incumbent candidates on challenger quality is the measurement of this quality. Existing studies that endeavour to quantify this effect rely on biographical
elements. These elements distinguish the high-quality challenger by whether or not they held an elective office before the election (Jacobson, 1980, 1990, Cox and Katz, 1996). They also set up a more accurate quality index using, for instance, the extra political notoriety or political experience (Bond et al., 1985, Green and Krasno, 1988a, b).

Given the huge number of challengers in France and the problem of collecting biographical information on all of the candidates, it is necessary to find approximate measures of challenger quality. Most of the studies (Bond et al., 1985, Green and Krasno, 1988a, b) conclude that challenger quality is highly correlated to the money raised by the candidate even if the effects of the quality and of the financing on votes can be distinguished. Indeed, the more a challenger is seen as valuable by the contributors, the more he is able to compete with the incumbent and the more money he obtains. This assumption is sustainable regardless of the origin of the money (voters, firms, political parties, etc.). For this reason, the challenger's campaign contributions are used as a proxy of his quality. So the idea is to estimate the impact of the cumul des mandats of the incumbent candidate on the quality of the challengers.

Among the candidates taking part in the election, I distinguish in each constituency the two best challengers who are the candidates best placed in terms of votes (respectively, challenger 1 and challenger 2).

From a general perspective, we note that the quality of these challengers approximated by their total campaign contributions diminishes with the rank of the challenger (Table 7).

We also observe that the money obtained decreases with the increase in the number of local elective offices held by the incumbent. I analyse econometrically the amount of campaign contributions per registered voter of the two main challengers. The three estimations are based on the same explanatory variables. The most interesting dependent variables are the number of elective offices held by the incumbent, challenger 1 and challenger 2 . The control variables are the same as those used previously: the wealth of the constituency, the 1988 margin of victory, the party of the incumbent and of the challengers, the fact that the incumbent is a Minister or a Vice-Minister, and the fact that the challenger is a Senator (sénateur) and the challenger is a former Member of Parliament.

The results of the two regressions presented in the Table 8 are conclusive about the impact of the cumul of the incumbent on challenger quality. The more local elective offices the incumbent candidate holds, the smaller the amount of money collected by the first or the second challenger. An additional elective mandate held by the incumbent induces the decrease of between 0.4 FF and 0.3 FF per registered voter in the challenger's campaign resources. The introduction of the non-linear form of the impact of the number of the incumbent's mandates is not conclusive; the relationship appears to be linear.

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Table 7 Electoral funding for the challengers and the cumul of the incumbent

|  | Number of offices held by the incumbent |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 0 \\ n=30 \end{gathered}$ | $\begin{gathered} 1 \\ n=231 \end{gathered}$ | $\begin{gathered} 2 \\ n=210 \end{gathered}$ | $\begin{gathered} 3 \\ n=3 \end{gathered}$ | $\begin{aligned} & \text { Overall } \\ & n=474 \end{aligned}$ |
| Funding of challenger 1 (FF) |  |  |  |  |  |
| Mean | 342,636 | 292,747 | 254,084 | 293,488 | 278,780 |
| s.d. | 174,382 | 190,054 | 179,866 | 286,182 | 186,268 |
| Funding of challenger $2(F F)$ |  |  |  |  |  |
| Mean | 138,791 | 137,951 | 101,459 | 57,907 | 121,330 |
| s.d. | 105,531 | 132,943 | 88,400 | 5,131 | 114,390 |

Initially, it appears that Challenger 2 is less affected than Challenger 1 by the cumul of the incumbent considering both the number of significant situations and the amplitude of the effects (Figure 5). The most negative situation for Challenger 1 is that in which the incumbent accumulates three offices and which leads to a decrease of more than 4.5 FF in resources per registered voter. In a similar manner, the cumul situations that involve a local executive mandate (President of a council, Vice-Mayor or Mayor) are more significantly influential than the others.

Additionally, two situations of incumbent cumul have a positive incidence on the resources of Challenger 1 (compared with none for Challenger 2): when $\mathrm{s} /$ he is simultaneously President of a regional council and a municipal council and when $\mathrm{s} / \mathrm{he}$ accumulates three positions of councillor. Moreover, the cumul of the challenger has also a tiny incidence on their quality.

As previously, the margin and the Minister variables have not a significant coefficient. If one distinguishes simultaneously the margin according to the fact the incumbent was elected at the first or at the second run, one notes the margin at the first round has a significant and negative impact, whereas the margin at the second round have not.

All of these results confirm the fact that the quality of the challengers is negatively affected by the cumul des mandats of the incumbent candidate.

## Conclusion

The baobab hypothesis provided by Yves Mény assumes that French politicians spatially concentrate local elective offices in order to increase their

Table 8 Estimation of the challengers' campaign resources

| OLS method; $N=474$ |  |  |
| :--- | :---: | :---: |
| Dep. var.: financing of the challenger per registered voter |  |  |
| Indep. var. | $(1)$ |  |
| Number of local offices held by |  |  |
| The incumbent |  |  |
| The Challenger 1 | $-0.385^{* *}(-2.34)$ | $-0.315^{* * *}(-3.03)$ |
| The Challenger 2 | $0.166(1.46)$ | $-0.068(-0.95)$ |
|  | $-0.027(-0.20)$ | $0.215^{* *}(2.36)$ |
| GDP of the area | $0.5 \mathrm{E}-05^{* * *}(5.11)$ | $0.3 \mathrm{E}-5^{* * *}(4.10)$ |
| Margin in 1988 | $-0.01(-1.13)$ | $-0.001(-0.26)$ |
| Incumbent minister or Vice-Minister | $-0.637(-1.40)$ | $-0.222(-0.75)$ |
| Challenger member of the senate | $3.844^{*}(1.84)$ | $1.078(0.79)$ |
| Challenger formerly MP | $0.755^{* *}(2.05)$ | $-0.163(-0.57)$ |
| Intercept | $5.653^{* * *}(4.90)$ | $2.604^{* * *}(3.39)$ |
|  |  |  |
| Adj. $R^{2}$ | 0.50 | 0.46 |
|  | $\mathrm{~F}(24,449)=20.65$ | $\mathrm{~F}(28,445)=15.13$ |
| Shapiro-Francia test for normal residuals | $z=5.991$ with $P<0.001$ | $z=8.293$ with $P<0.001$ |
| Shapiro-Wilk test for normal residuals | $z=6.570$ with $P<0.001$ | $z=9.451$ with $P<0.001$ |
| Breusch-Pagan/Cook-Weisberg test for | $\chi^{2}(1)=69.29$ with | $\chi^{2}(1)=255.61$ with |
| heteroscedasticity | $P<0.001$ | $P<0.001$ |

[^4]electoral survival. These politicians are similar to a baobab tree. Indeed, politicians holding several offices concentrate the political resources available such as political income, the logistical support of the offices, the electoral use of the local budget, and electoral financing. This concentration of resources leads to the increased likelihood of election or re-election and deters high-quality challengers from running in the election. In this paper, I argue that the baobab strategy can be compared to erection of entry barriers into the French electoral process. Two empirical assumptions can be deduced.

Analysing the 1993 legislative election, I test both assumptions. The estimation of the campaign contributions obtained by the 5,141 candidates


Figure 5 Detailed impacts of cumul des mandats of the incumbent on the challenger's campaign contributions. c, councillor, and Pt , President. Only the significant coefficients (at least at the 10 per cent level) are presented. The coefficients are given by the previous estimation using 21 dummy variables instead of the number of local offices held by the incumbent. The completed result can be obtained by request: abel.francois@enst.fr.
running in the election: I demonstrate that the total amount, the contributions by voters and by firms, is higher when the candidate holds local elective offices. Secondly, the more local elective offices the incumbent candidate holds, the fewer the number of candidates there are and the lesser the quality of the challengers is. Thus, both hypotheses are validated by the empirical analyses.

Finally, the analogy proposed by Yves Mény appears to be relevant and founded theoretically by the notion of entry barriers and empirically by the description of the statistical effects of the cumul.

On the other hand, and since the 1993 election, the institutional framework of the cumul has changed. Firstly, campaign financing laws have dramatically changed. Secondly, the regulation of the cumul des mandats was modified by the law of 2001. ${ }^{20}$ Thirdly, the development of intermunicipal structures whose offices escape this new regulation provides new opportunities for the cumul. From these evolutions, we can suppose that if the strategy of cumul based on the concentration of political resources remains relevant, the resources concerned have changed.

## Acknowledgements

We would like to thank André Blais, Martial Foucault, Raul Magni-Berton and one of the two referees for their helpful and fruitful comments.

## Notes

1 I use the synonymous French expression of 'cumul des mandats' or 'cumul' in the text.
2 Except for Andrew Knapp's study (1983).
3 Moreover, the spatial and the temporal accumulation of elective mandates can be added. For instance, in the French case, an incumbent candidate can also hold local offices.
4 The distinction between the innocent and the strategic entry barriers has been used by industrial organization literature since Salop (1979, 335): 'an innocent entry barrier is unintentionally erected as a side effect of innocent profit maximization. In contrast, a strategic entry barrier is purposely erected to reduce the possibility of entry'. The application of the distinction to the political process is provided by Wolgemuth (1999) and the initial application of entry barriers to the political process is provided by Tullock (1965).
5 For a survey of the resource advantages of the incumbent, see Cox and Katz (1996).
6 Loi organique du 30 décembre 1985 no. 85-1405 and loi ordinaire du 30 décembre 1985 no. 85-1406. For a discussion of these Laws and the 2001 one, refer to CREAM (1998) and Augé (2001).
7 For a survey of literature dealing with the link between resources engaged in the campaign and the electoral success, see in particular François (2003) and Stratmann (2005). And for an application of the link to the French electoral process, see Palda and Palda (1998) and Foucault and François (2005b).
8 On the question of the impact of multi-holding of elective offices on the efficiency of electoral spending, see François (2003), and on the electoral outcome, see the article of Martial Foucault in the same issue of this journal.
9 The French legislative cycle shows the defeat of the incumbent majority at every election since 1978.

10 This assumption is realistic because French MPs are elected by a limited and local population. There are 555 constituencies in France (excluding the overseas districts) whose average population equals 68,300 registered voters.
11 The information about the cumul des mandats comes from the Le Monde special issue on the election outcomes.
12 Owing to the regulation of the cumul, I consider in the statistic description that each incumbent holds an additional local elective office.
13 In each case, we can reject the hypothesis of difference at the 5 per cent level with a test of proportion (the statistics are, respectively, 1.75 for proportion of municipal councilman vs proportion of regional councilor and 1.23 for proportion of regional councilor $v s$ proportion of departmental councilor.
14 I exclude the 22 overseas districts.
15 For a more detailed analysis on the financing strategies in 1993 election, see François and Sauger (2006) and Phelippeau and Ragouet (2006).
16 I use this figure given the fact that this is the most disaggregated data available on local wealth.
17 A former member of the parliament has to raise more money because his/her new candidature supposes that he manage to obtain financing until the election.
18 More accurately, among the 474 constituencies, there are 25 where the incumbent candidate is an incumbent Minister or Vice-Minister who resigned from his/her deputy office.

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19 The margin is calculated as follows. If the incumbent was elected in the second ballot, this is the ratio of the variation of the vote at the second round between the winning candidate and the first challenger on the expressed votes. If the incumbent was elected at the first round or if there is a single candidate at the second round, the margin is the ratio of the variation of the vote at the first turn between the winning candidate and the first challenger on the expressed votes.
20 Loi organique du 5 avril 2000 numéro 2000-294 and Loi ordinaire du 5 avril 2000 numéro 2000-295.

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[^0]:    Source: Ministère de l'intérieur.

[^1]:    c., councillor; Pt, President.

[^2]:    Each mean is statistically higher than the mean of the preceding category. The null hypothesis indicates the difference equals zero, and the alternative one the difference is positive. The statistics are, respectively, $-27.3,-18.4$, and -4.4 .
    Note: Owing to the regulation of the cumul, I consider each incumbent holds an additional local elective office.

[^3]:    Shapiro-Francia test for normal residuals: $z=3.961$ with $P<0.001$.
    Shapiro-Wilk test for normal residuals: $z=4.336$ with $P<0.001$.
    Breusch-Pagan/Cook-Weisberg test for heteroscedasticity: $\chi^{2}(1)=9.98$ with $P<0.01$.
    The $t$-ratios are given between parentheses.
    ***Coefficient is statistically significant at the 1 per cent level.
    **Coefficient is statistically significant at the 5 per cent level.
    *Coefficient is statistically significant at the 10 per cent level.

[^4]:    Dummies indicating the party of the incumbent candidate and of the first challenger (National Front (FN), Miscellaneous left, Left Radicals (MRG), Communist Party (PCF), Socialist Party (PS), Rassemblement pour la République (RPR), and Union for French Democracy (UDF)) and of the second challengers (Miscellaneous left, Extreme left, National Front (FN), Environmentalists (GE), Presidential majority, Left Radicals (MRG), Communist Party (PCF), Socialist Party (PS), Regionalists, Rassemblement pour la République (RPR), Without party affiliation, Union for French Democracy (UDF), and Greens) are also introduced but not reported.
    The $t$-ratios are given between parentheses.
    ***Coefficient is statistically significant at the 1 per cent level.
    **Coefficient is statistically significant at the 5 per cent level.
    *Coefficient is statistically significant at the 10 per cent level.

