Office or Officeholder? Regime Deinstitutionalisation and Sources of Individual Political Influence

Alexander Baturo
School of Law
and Government
Dublin City University
Glasnevin, Dublin 9, Ireland
alex.baturo@dcu.ie

Johan A. Elkink
School of Politics
and International Relations
University College Dublin
Belfield, Dublin 4, Ireland
jos.elkink@ucd.ie

Abstract

How to separate the office from the officeholder is one of the most difficult questions in the empirical study of institutions and leadership. We argue that provided there is an indicator for the overall individual influence among members of the political elite and there is sufficient variability among individuals taking the same office, being promoted and demoted into different offices over time, we can separate latent individual and institutional components of influence at an aggregate, regime level. Our latent variable model thus provides a new tool to measure the degree of regime deinstitutionalisation. Using expert surveys that assess the ranking of the top political actors in Russia from 1994–2011, and restricting personal effects to those that are constant over time, we find that on average office dominates individual by the order of two. We discuss regime deinstitutionalisation in comparative perspective; demonstrate the generalisability by analysing Ukraine; account for patronage networks.

Key Words: leadership, deinstitutionalisation, latent factor model, Russian and Post-Soviet politics

Does the political office that an individual occupies primarily determine one's overall political influence, or can the same office be strengthened or weakened depending on the officeholder? Recently, there has been a surge of scholarship that examined with new rigour whether leaders matter (e.g., Dewan and Myatt, 2008; Goemans and Chiozza, 2009; Horowitz and Stam, forthcoming; Jones and Olken, 2009). Nonetheless, it remains extremely difficult to attribute causality to particular officeholders, discern the effects of leaders from other factors, or disentangle the office from the individual officeholder (Ahlquist and Levi, 2011; Shamir, 2012; Sheffer, 1993).

This paper directly confronts the empirical difficulty of separating the effects of leaders on policy, thereby addressing a centuries-old conundrum in political science. We do this through a novel measurement tool for the separation of different sources — or components — personal (*officeholder*) and institutional (*office*) — of the individual's influence. This approach largely permits us to side-step assumptions about the relative effects of individual traits, followers and contextual factors, and to identify the effects of leaders and institutions in a non-experimental setting. The expert survey we rely on provides one observed variable measuring the perceived policy influence for the most important actors within a political regime over time and thus the data itself cannot, at first sight, provide information on the relative importance of individual and office.[1] However, because over time different actors can hold the same office and the same actor can hold different offices, we can capture the corresponding changes in influence scores and use this variation to gauge the relative importance of the person and the office. We therefore measure, at an individual level, the relative attribution of influence to office and individual, and, at an aggregate level, the

---

[1]An online supplementary appendix is available at http://www.journals.cambridge.org/jop. Data and supporting materials necessary to reproduce the results will be made available at `http://www.joselkink.net/research` upon acceptance.

overall level of regime institutionalisation. The Bayesian latent variable model that we rely on imposes several restricting assumptions, such as that neither the powers of a particular office nor the personal influence of a particular individual change over time. Therefore, we measure the effects of time-invariant aspects of the personal component, e.g., education, prior career and personality, and relegate more idiosyncratic aspects to the residual. However, we also explain and demonstrate the model validity under different assumptions.

As our primary case study, we analyse the contribution of office and the individual to political influence in Russia between 1994 and 2011. The game of musical chairs played by Presidents Putin and Medvedev in 2008, and again in 2012, suggests that Russia shows the characteristics of a deinstitutionalised regime, of a "dual state" that combines formal institutions with elements of a personalised regime (Sakwa, 2011). This provides us with an interesting opportunity to assess institutional influence in a regime where the institutional rank of the top official does not correspond with their effective rank, "a policy called *politique de doublure*, or 'politics of understudy'" (Chehabi and Linz, 1998, 17). The degree of regime deinstitutionalisation, whether in Russia or more generally, is difficult to gauge as the comparative literature lacks the required measurement tools. Our findings indicate that even in Russia institutions matter and actors connected through patronage — which we control for explicitly — exercise their influence primarily through formal posts. These conclusions are corroborated by similar results in a second case study using Ukrainian data. Our results suggest that regimes which gravitate toward personalism can be more institutionalised than they appear.

After a review of the empirical difficulties in studying the effects of institutions and leaders, we discuss how the concepts of the office and officeholder relate to regime institutionalisation. We explain the expert survey data next, present the statistical model and its underlying assumptions,

and follow with a detailed discussion of the results.

Leaders, Institutions, and Deinstitutionalisation

One of the central questions in social science is whether institutions matter (North, 1990). Because institutions emerge and operate in a real world environment, the problems of identification and measurement are unavoidable (e.g. Acemoglu, Robinson and Johnson, 2001). It is difficult to isolate institutional effects from those of structural conditions or even from the strength of power-holders (e.g. Przeworski, 2004). Despite the continuing debates over endogeneity however, institutional arguments are rightly at the fore of political science research. Similarly to institutional scholars, leadership students must separate the effects of leaders from a larger context — leaders occupy offices in some predefined structures (Ahlquist and Levi, 2011, 6). For instance, Canes-Wrone (2006), in order to attribute particular policies to *individual* presidents rather than to the *office* itself or other factors, examines historical evidence that incumbent presidents held prior beliefs about appropriate policies. The effects of leadership are also explored through experiments (e.g. Humphreys, Masters and Sandbu, 2006) or a quasi-experimental design.[2]

In practice, empirical separation of office from officeholder is extremely difficult. Indeed, regimes usually attract individuals with traits already conforming to existing norms; people often encounter cognitive biases while attributing causality to leaders (Patty and Weber, 2007). Likewise, there is no agreement as to what scholars of leadership should examine. Indeed, many leadership studies are concerned with the effects of institutions on leader survival in office rather than with

---

[2]See Jones and Olken (2009) on assassinations. The institutional context following the death of a long-standing autocrat can change dramatically however, even if a successor enters the same nominal office.

the effects of leaders as such (e.g. Bueno de Mesquita et al., 2003). Studies exist that examine leadership primarily as the process of interaction between leaders and followers (e.g. Baturo and Mikhaylov, 2013; Dewan and Myatt, 2008), or examine the effects of leaders' traits (e.g., Horowitz and Stam, forthcoming). In a recent review, Shamir (2012, 353) underlines that the study of leadership encompasses "the interaction between the leader, the followers, and the situation." How to tell leadership effects from those of personal traits, those arising from relations between leaders and their supporters, and of offices they occupy, is unclear (Ahlquist and Levi, 2011).

As we explain below, we propose a novel technique that enables us to separate different components — personal (*officeholder*) and institutional (*office*) — of an individual's influence.[3] Furthermore, because the effects of particular leaders can be idiosyncratic and conflated with those of other factors, we do not focus on *specific* offices or individuals. Instead, taking the conceptualisation of institutions as relatively enduring rules "that are *relatively invariant in the face of turnover of individuals* and *relatively resilient to the idiosyncratic preferences*" [emphasis is ours] (March and Olsen, 2006, 3), we aggregate the contribution of personal and institutional components of individual political influence among all relevant offices and officeholders within the regime overall, in our case study. At the aggregate level, the resulting quantity is a ratio of office to personal components, or a direct measure of regime institutionalisation.

Regime deinstitutionalisation is the term used to assess the relative importance of political institutions, the routinisation of norms and institutional practices — or lack thereof (Huntington, 1968, 12–24). Scholars infer the degree of institutionalisation, or personalisation, from the presence of institutions (Gandhi, 2008; Geddes, 1999) or behaviour (Baturo, 2010). However, formal institu-

---

[3]Scholars have long recognised that the leader's power can be rooted either in the institutional structure (in the office) or in the personal qualities of the officeholder (Weber, 1978, 1140–41).

tions can exist in personalised regimes also, primarily buttressing the existing patronage networks and having very limited real authority (Wright, 2008). It is also common for individuals to exert more influence from their ostensibly lower-ranked offices than their nominal superiors (Chehabi and Linz, 1998, 36). In such cases, the degree of regime institutionalisation is hard to gauge.

Provided we are able to measure the individual's influence over time and know what offices one occupied, we will be able to observe whether a particular office becomes more powerful when it is taken by a particular individual or whether the individual becomes more influential when she changes offices. Therefore, our analyses only require sufficient variation in the identity of office-holders and the offices they occupy. We assume that the influence derived from the particular office in its institutional context, and the influence to be attributed to the individual, are time-invariant for each office and each individual respectively. As Rose (1991, 10) underscores, the influence of office "exists independently of its transitory incumbents; it is there before a particular individual becomes prime minister and it will remain after the individual leaves," therefore it can be plausibly treated as constant over time.[4] The *overall* personal influence can vary significantly over time, however: politicians can fall in or out of favour; experience a scandal, gaining or losing their personal clout. Instead, following the trait-approach conceptualisation of leadership (Northouse 2009, 15–38; Stogdill 1948), we restrict the personal effects of *officeholder* to be time-invariant and primarily measure the effects of personal background and inherent traits such as education, intelligence, psychological type, prior career and skills. Indeed, we know that the observable background traits of leaders can have significant effects on various policies, for example, militarised behaviour or economic reform (e.g. Bunce, 1981; Dreher et al., 2009; Horowitz and Stam,

---

[4]Whenever a particular office undergoes manifest changes in powers, for example, *elected* and *appointed* governors, we treat it as two different types of office.

forthcoming); their psychological predispositions also matter (e.g. Hermann and Kegley, 1995). Because an overall personal authority is highly volatile and idiosyncratic, our approach primarily accounts for the time-invariant personal aspects of influence and omits the impact of more volatile personal clout and reputation.[5] We relax the assumption of constant personal effects in additional analyses, however.

Office and Officeholder in the Expert Survey of Individual Influence

We attempt to estimate the overall level of institutionalisation by investigating the average importance of office or officeholder across a wide range of individuals over a long time period. The collection of observational data that accounts for individual political influence over various policies for a considerable number of officeholders and offices over time would be a daunting, if not impossible, exercise. In similar measurement tasks whereby the number of cases is high and the precise operationalisation is difficult to define, while the concept itself has a reasonably consistently-shared meaning, expert surveys became a popular tool (Meyer and Booker, 2001). Expert surveys are not only practical when other data about latent phenomena is not available, they often outperform other methods, such as public opinion surveys (Benoit and Laver, 2006, 71–77). An extensive literature exists on expert surveys (e.g. Meyer and Booker, 2001) and using perceived influence as a measure of influence more generally (Polsby, 1963, 45–51), starting with the pioneering work of Hunter (1953). Studies also exist that employ surveys to compare the political influence of top national executives (e.g. O'Malley, 2007).

A unique expert survey exists concerning the level of individual political influence in Russia, *100 Most Influential (Leading) Politicians of Russia*, conducted by the survey company Vox Populi

---

[5]We are grateful to the anonymous reviewer for this important point.

(from 2002 Vox Populi-T), together with the *Nezavisimaya Gazeta* daily. The expert survey provides monthly data on the *perceived* individual influence on politics and various policies, whether foreign, military, fiscal, or law and order, and is the key variable we rely on in our analysis. This indicator is on the same scale for all individuals in the panel. A group of experts evaluates the influence of leading political actors and assigns monthly scores on a scale of one to ten. The average score for each actor is then calculated and reported and individual ranks from one to one hundred are also assigned on the basis of this score. The survey does not report estimates of uncertainty but the number of experts each month is considerable and typically numbers around 50 individuals. These experts follow politics on a daily basis and many report professionally in the media on minute political developments. We employ survey results from November 1994 to March 2011; the data represents the uninterrupted monthly series of the Top 100 panel of political actors in this period, ranging from the president (typically) at the top to regional politicians and civil servants down below. While this survey has been used by sociologists who chart changes in the composition of elites (e.g. Kinsbursky, 2003; Kryshtanovskaya, 2002), political science scholarship has ignored it despite its scope and breadth of data. Altogether, there are 484 unique individuals in the period and 19,675 observations in total. On average each individual remains in the survey for four years; every month five to ten individuals exit and enter the ranks, many do so repeatedly.

Clearly, expert surveys are not without their problems however. Przeworski (2004) argues that the expert assessment of political risk in a widely cited study by Acemoglu, Robinson and Johnson (2001) is contaminated by the experts' perceptions of risk in wealthy countries. Equally, we rely on the expert perceptions of influence. We do not measure observable effects of such influence on particular policies. The assumption is that surveys generating measures of perceived influence provide valid estimates of policy influence. Furthermore, for the decomposition we are

interested in — the separation of office and officeholder — additional requirements are placed on the data: it is conceivable that experts simply use the information about observed appointments and dismissals as informational shortcuts and assign scores based on these cues alone. In the supplementary materials therefore, we examine the survey validity in detail. We find that while experts do take into account promotions and demotions, they also consider other factors such as public opinion approval and media coverage of particular individuals and their personal traits; the experts even apparently react to monthly oil price changes for those with the energy portfolio. In general, this adds to our confidence that the survey is not simply a reflection of expert perceptions as to how important particular offices are.

The survey only reports individual names and their scores. Therefore, for each individual officeholder we must assign the "office" that he or she occupies.[6] Having collected detailed information about the particular office for each individual over time, for instance, the office of the minister of transport or head of a particular state company, we further aggregate these posts into 48 more general offices. Some of the offices — 18 out of 48 — do not require aggregation, such as that of prime minister which is always occupied by one individual at any given time. Other offices, such as that of the minister of transport, is assigned to the category of *cabinet minister, various*. The choice of 48 office categories is relatively arbitrary. A very low number of offices, however, would lead to a very low number of changes in office and thus provide too little data for the estimation of latent factors. A high number of offices on the other hand would lead to too few

---

[6]The supplementary appendix provides details on the published sources for the survey, our coding rules and additional sources for the type of office, actors and their background, as well as various auxiliary variables. Additionally, we plot the raw data distributions of various office categories and include sensitivity analyses on the impact of varying the levels of office aggregation.

individuals within the same office to estimate the importance of personal influence.

Figure 1 plots the distribution of influence for each post separately for the 1990s and 2000s. While the ranking of offices, which in turn depends on the average score of influence, has certain similarities between the period of Yeltsin's presidency and that of his successor, important differences are also visible. Thus, even though the president and prime minister are at the top in both periods, in the 1990s the mayor of Moscow keeps the third place and the upper chamber's speaker fifth, while in the 2000s the former is only fifth, while the latter is a distant nineteenth. Also, in the 2000s even those who are dismissed from their posts usually remain in the top ranks. The fact that the majority of individuals remain in the survey, yet frequently change office, permits us to evaluate the relative contribution of personal and institutional components to the observed scores.

Empirical Estimation of the Two Sources of Individual Influence

To estimate the unobserved levels of personal and institutional influence, we will make use of what is known as the Item-Response Theory (IRT) model in the educational literature. The typical example for such a model is the analysis of test scores among a group of students (Reckase, 1997). The scores can be assumed to be driven by two factors: the ability of students and the difficulty of the question. The estimation of these two unobserved variables is made possible by the assumption that the difficulty of the question does not change when different students answer the question and the ability of the student does not change from one question to the other. This approach has, for instance, been applied to estimate latent ideological policy space (see Quinn, 2004) and latent democracy scores (Treier and Jackman, 2008). Our model is as follows:

$$SCORE_{it} = \beta_0 + \beta_1 \eta_{j_{it}}^{O} + \beta_2 \eta_i^{P} + \beta_4 \tau_t + \varepsilon_{it}, \tag{1}$$

whereby *SCORE* is the influence score; η^O and η^P the latent influence scores based on the office and on the person or officeholder, respectively; τ a cubic time spline; and *i* refers to the person, *t* the month, and *j* the office category. Each individual politician *i* appears at most once in each month, while the same office category *j* can have multiple occupants in a month. $\eta^O_{j_{it}}$ therefore denotes the latent office influence score of the office category occupied by individual *i* at time *t*, while the office influence score of the particular office category η^O_j does not vary over time. Both η^O_j and η^P_i are constant over time for each office and person, and are assumed to be normally distributed. Nevertheless, we conduct additional analyses that include the effects of patronage and fit an auxiliary model that relaxes the assumptions of time-invariant η^O_j and η^P_i, as explained below.

We do not add further control variables, since what we are investigating is a decomposition, a measurement of underlying dimensions of influence, not a causal relationship. This is also the reason for using a time spline instead of, for instance, a lagged *SCORE* on the right-hand side. With the latter, we would be investigating partial adjustments over time, while we are interested in breaking down average levels over time.

τ represents a cubic spline to control for the fact that the average level of influence on the hundred most influential politicians changes over time without there being any clear indication that this has substantive meaning. The spline is defined as the predicted scores based on a linear regression of the form: $SCORE_{it} = \gamma_0 + \gamma_1 t + \gamma_2 t^2 + \gamma_3 t^3 + \gamma_4 d + \gamma_5 dt + \gamma_6 dt^2 + \gamma_7 dt^3 + u_{it}$, with *d* a dummy variable to capture a strong discontinuity visible in the raw data. In all model specifications τ is based on the entire dataset over the whole period.

η^O and η^P are both standardised, such that we can take the β_1 and β_2 estimates as being on a comparable scale. This implies that a higher estimate of β_1 can be interpreted as a change in η^O having a relatively greater impact than a similar change in η^P on the overall reputational influence

score of the individual politician. Furthermore, as argued earlier, the analysis here concerns a decomposition, not a causal analysis, and "importance" here should be seen as whether a difference in η^P or in η^O would be related to a larger difference in personal political influence (cf. Blalock, 1961, 867). Because of this, our primary interest is in the ratio of the two β-coefficients which can be interpreted as the relative importance of office to that of officeholder in determining the overall influence and which becomes our measurement of regime institutionalisation:

$$\zeta = \frac{exp(\beta_1^*)}{exp(\beta_2^*)} = \frac{\beta_1}{\beta_2}. \tag{2}$$

Primarily because of the need for uncertainty estimates on the ζ-ratio, we take a Bayesian approach which allows us to sample directly from the posterior distribution of this ratio. In a Bayesian framework, it is required to provide prior information. For a sufficiently large dataset such as this expert survey, the impact of the choice of prior will be minimal. β_0, β_1^*, β_2^* and β_3 all have a normal prior distribution with mean zero and precision 10^{-4}. The prior normal distribution of η_j^O has a mean of zero and precision 1 for all j and of η_i^P mean zero and precision 1 for all i. The prior of the precision of the error term follows a gamma distribution $\Gamma(10^{-3}, 10^{-3})$. To make estimation possible, two inconsequential contraints are applied to the model: the β parameter is transformed such that $\beta_1 = exp(\beta_1^*)$ and $\beta_2 = exp(\beta_2^*)$, and the variances of the latent variables are constrained to $\sigma_{\eta^O}^2 = \sigma_{\eta^P}^2 = 1$. The model parameters are estimated by sampling from the posterior distribution using a Gibbs sampler. The main models have been estimated with 11,000 iterations, whereby the first 1,000 iterations are discarded. All models pass the Heidelberg-Welch tests for convergence (Heidelberger and Welch, 1983).

Results and Discussion

[Table 1 ABOUT HERE]

Table 1 provides the estimates for the regression coefficients and ζ-ratio. The estimations have been repeated for different subsets of the data.[7] The first column covers the entire period, followed by data covering the 1990s (Yeltsin), 2000s (Putin), as well as Yeltsin and early Putin's period (until December 2003, fourth column), and the "late" Putin period after December 2003 which was characterised by the dominance of the president and federal centre, in the fifth column.

The interpretation of the β-coefficients themselves is of only limited relevance: the more interesting results can be found in the fifth row, providing the ζ-ratio. For the full period since data collection started, this ratio is estimated as 1.99, implying that office is almost twice as important than officeholder in terms of the overall influence score. The most striking outcome visible in Table 1 is the relative stability of the results over time. While under the presidency of Putin, the ζ-ratio is lower, this difference is (just) within the margin of error of these estimates. This suggests that our model genuinely picks up on a structural aspect of power relations in the Russian political elite, rather than being dependent on particular idiosyncratic factors for specific time periods.

The dominance of office over individual is clear in different periods. Still, the period following the December 2003 elections that was characterised by the exit of many officials who had gained influence in the 1990s and by the increased dominance of Putin's inner circle can be characterised as more deinstitutionalised with office still dominating officeholder, albeit by the order of one and a half only. Indeed, consider the case of President Medvedev — even though Medvedev

---

[7]The categories of "businessman", "separatist, Chechnya", "former politician", "media, various" and "other" are excluded. Indeed, "businessmen" or "former politicians" do not occupy political office by definition and their personal influence is equal to the overall influence.

(2008–12) occupied the most politically powerful office, his Prime Minister, Putin, clearly pre-empted the former in overall influence despite being outranked formally (Baturo and Mikhaylov, 2013; Sakwa, 2011). The divergence between office and officeholder's influence can also be found across different ranks of the political elite, exemplified by nominally subordinate officials arguably exerting more influence than their superiors — for instance, a deputy head of the presidential administration over a head of that administration, and over time.

The fact that many political actors, including Vladimir Putin in 2008–12, were powerful not because of their posts, but despite them, indicates a certain degree of deinstitutionalisation. Many observers believe that the regime has deinstitutionalised significantly under Putin (Petrov 2011, 6–7; Sheinis 2004, 47). Russia features what O'Donnell (1996) defines as weak institutions: there are frequent changes of formal political institutions and rules, especially in the early to mid–1990s and the 2000–2004 period, and compliance with rules is low. At the same time, even though many actors gained their influence through personal connections under Putin's "patronal presidentialism" (Hale, 2005) and informal networks underpin formal institutions (Helmke and Levitsky, 2006), there was a broad consensus among elites co-opted into the ruling party by the end of the 2000s (e.g. Remington and Reuter, 2009). A plethora of formal political institutions exist through which actors make their careers. These can also indicate, in comparative perspective, that a regime is institutionalised (Gandhi, 2008). In other words, the existence of institutions that are designed to manage the intra-elite conflict alongside extensive patronage networks and constant shuffling of the same officeholders between offices poses a puzzle as to the extent to which the regime is deinstitutionalised.

The main empirical result that we obtain addresses this puzzle directly. In Russia, and even in the "late" Putin period, institutions matter more than the officeholders who occupy them. Our

findings support the opinion of many scholars regarding the importance of institutions in Russia (e.g. Remington and Reuter, 2009), yet they also validate various qualitative assessments of personalisation under Putin among area specialists (e.g. Sakwa, 2011, 72).

[Figure 2 ABOUT HERE]

To assess the model validity and, in particular the ζ-ratio, we can evaluate the predicted values for individual politicians or particular offices over time. Figure 2 illustrates the logic behind the estimations using four examples. Firstly, the offices of prime minister and chief of staff to the president are shown. Influence derived from any particular office is by assumption constant over time, and the variation between different occupants of these offices, therefore, will be due to their personal influence. The gradual decline in the importance of the prime minister can be clearly seen — Fradkov in 2007 is widely regarded as an unimportant bureaucrat — with a sudden transfer of influence from the presidential office to that of the prime minister when Putin chose to depart the presidency in 2008. The evolution of the chief of staff's influence also follows a pattern in line with what observers of Russian politics would recognise.

Secondly, we show the pattern for two individual politicians. In the bottom plots, the level of influence due to officeholder is constant by assumption, with the variation over time determined by the level of influence derived from various offices. We can clearly see the steep rise to power of Prime Minister Primakov and his subsequent decline into a far less influential position, that of head of the Russian Chamber of Commerce and Industry. Sobyanin, the successor to Luzhkov as Mayor of Moscow, is depicted in the last plot. As a regional governor he was only included in the survey for a few months until he was suddenly appointed to the position of the president's chief of staff. Then, after a short period as vice prime minister — of which there are several at any given time — he returned to an influential position as mayor of Moscow. In general, these four plots clearly

16

follow the pattern we would expect from the hypothesised influence of office versus officeholder in that office, thus adding confidence to the validity of the statistical model.

Office and Officeholder in Comparative Context

How applicable is this method of estimation to other political regimes? One of the observable manifestations of deinstitutionalisation is when the highest political office is occupied by an officeholder whose authority is weaker than that of an effective, *de facto* leader in a nominally subordinate office. Based on Cheibub, Gandhi and Vreeland (2010) data, in the 1946–2008 period 117 effective political rulers (nine percent of all country-year observations) are not the nominal heads of government. Instead these rulers command their countries from different posts or may even have no formal position at all. Alongside effective rulers, almost two hundred individuals occupy the formal post of the head of government at various times. Medvedev's presidency is representative of this phenomenon and clearly resembles the effective "national leader"–nominal president pair in Table 2 that summarises instances of dubious or even outright impotent nominal leaders across the world.[8] Some *de facto* leaders rule from behind one nominal head, while others have several during their often long tenure. Thus, Rafael Trujillo (1930–61) in the Dominican Republic installed four different proxy presidents including his own brother to serve between his terms.

The difference between nominal and effective rulers provides *prima facie* evidence for regime deinstitutionalisation, at least at the top ranks. Likewise, depending on the presence of particular institutions, we can assign ordinal or categorical values (e.g. non-, weakly, under) to the degree of

---

[8]Sixty effective rulers (93 pairs) — leaders of the military, "paramount" leaders, even cabinet ministers — occupy neither the national nor their party's top post. In fact, one in every fourteen nominal leaders at the very least is deprived significantly of policy influence.

regime institutionalisation (Gandhi, 2008, 42–72). However, we do not know whether differences between nominal and effective leaders exist among lower ranks, nor do we know the strength of institutions overall or how the latter mitigate personalism. Based on the data of individual political influence in Russia, we are able to do just that.

[Table 2 ABOUT HERE]

The data does not allow us to draw conclusions about the relative importance of office and officeholder anywhere outside Russia. Nevertheless, nothing suggests that the method would not be applicable in other contexts, provided that detailed indicators on the overall political influence of a set of actors can be found over a sufficiently long time period. To gauge the validity of our method we examined a similar survey, the annual ranking of the top 100 Ukrainians published in *Korrespondent* weekly, available for the period 1993–2013, collecting and classifying office categories in the same manner as we did for the Russian survey, as explained in the appendix.

The data for Ukraine is ordinal with the actors only assigned ranks from 1 to 100. We cannot compare the scores in Russia with the Ukrainian ranks, however, the Russian survey already includes ranks from 1 to 100 that are derived from the assigned scores. The distances between average scores for the top ranked actors in Russia are larger than those for the lower ranked ones; as it turns out, a simple log-transformation of ranks renders the distribution of the ranking variable in Russia very similar to that of the scores.[9] As can be seen in the last two columns of Table 1, the estimation of the main model provides similar results when the logarithmically transformed ranks are used compared to when raw scores are used. We therefore apply the same transformation to Ukrainian ranks. This is further supported by the fact that both regimes have somewhat similar

---

[9]Regressing the ranks on the scores, controlling for the time spline, $R^2 = 0.75$, which increases to $R^2 = 0.94$ when the log-transformation is applied to the ranks.

institutional executive structures (e.g. the same three nominal offices at the top in both surveys), even if the legislature is more prominent in Ukraine. Because we are no longer concerned with the raw scores not having a fixed or constant reference scale, we omit the time spline since the ranking does not contain this ambiguity. The results for the Ukrainian elite from 2003 are similar to that for roughly the same timeframe in Russia from 2004. Neither regime is fully institutionalised and even though office appears more important than officeholder overall, both Russian and Ukrainian surveys feature businessmen and presidential affiliates in prominent ranks (e.g. in Ukraine in 2012 a personal friend and son of President Yanukovych are ranked at 3–4). Because we expect that the institutionalisation of these two regimes is not dissimilar, the comparison gives us additional confidence that the latent parameters we estimate indeed capture the importance of office and officeholder in Russia and therefore, its deinstitutionalisation.

Further Analyses and Discussion

The model specification is based on several assumptions, namely that (1) the overall influence of individuals is independent of that of other individuals in the sample; (2) latent influence components are independent of each other; (3) the influence to be derived from a particular office is constant over time; (4) the authority of a particular individual is constant over time. How valid are these assumptions?

To address the possible issue of interdependence of observations, we can modify the model to account for patronage which is common in personalised regimes (Wright, 2008). Indeed, Putin's regime is underpinned by patron-client networks — a system of so-called "patronal presidentialism" (Hale, 2005) where the president plays the role of the arbiter. While there exist numerous

studies about informal power relationships in the Kremlin (Petrov, 2011; Sakwa, 2011), these provide only subjective assessments. Indeed, how informal institutions and networks can be identified and their effects studied is a major challenge to comparative politics (Helmke and Levitsky, 2006, 25–28). In simple terms, in addition to the powers of office and personal traits, we can posit that individual influence is also driven by that of one's patron. For instance, it is conceivable that the officials closely affiliated with President Medvedev gained and then lost their overall influence when their patron acquired and then departed the presidency.

We therefore collect an original data on patron-client relationships among the actors included in the survey. In general, patrons are individuals that the media or biographical entries believe to command the loyalty of particular clients, usually because the former brought them into either politics or civil service. We identify one or two patrons, or none, for each individual. In some cases, individuals do not have identifiable patrons while in other there is no reliable data on patronage, as we explain in the appendix. We change the original specification as follows:

$$SCORE_{it} = \beta_0 + \beta_1 \eta_{jit}^O + \beta_2 \eta_i^P + \beta_3 PATRON_{i,t-1} + \beta_4 \tau_t + \varepsilon_{it}, \qquad (3)$$

where *PATRON* is the monthly lagged score of the patron(s). The *PATRON* variable is set to zero where an individual does not have a patron and the observation is list-wise removed when the patron's score is unavailable for another reason. The last column in Table 1 indicates that patronage does play a role in the explanation of individual influence. However, while the coefficient is statistically significant, substantially it is dwarfed by the two main factors. The ζ-ratio is nearly identical after accounting for patronage.

We are wary of including patronage in all specifications, however. In addition to losing ob-

servations when patronage is not identified, it is also a very "soft" indicator. While there is an agreement in the media about the identity of "clients" that came with Putin from Saint-Petersburg for instance, and we attempted to validate patronage estimates from several sources, it is an informal arrangement that changes over time and varies in degrees of affinity. In our analysis, the assignment of a particular patron to a person is time-invariant and it is conceivable that clients can have different patrons during their careers, or even turn against them.

The relationship between office, officeholder and patronage can be even more complicated with personal qualities as well as patronage network relations determining office and vice versa. Thus, the position in the informal elite network around the "patronal" president might determine personal influence. Such informal networks can then be organised formally and determine the official political posts obtained by individuals. If that is the case, the *office* component, and for that matter, that of the *officeholder*, if we treat it conceptually different from patronage, is potentially overestimated in our analyses. However, the fact that politically-connected businessmen feature prominently in the survey indicates that not all individuals on this informal network, if it exists, are granted formal powers. More importantly, because reliable data about informal networks is not available by definition, we decided to base our estimations on what we can observe, such as promotions and demotions, and to avoid subjective assessments. In addition to interdependence between individuals, one might expect interdependence between the two latent factors. The fact that an individual is a former prime minister will provide that person with a certain level of authority which is not derived from the office held subsequently. Personal influence derived from the sway of prior offices is still personal influence under our definition or, for that matter, under that of philosophers in antiquity.[10]

_____

[10]In antiquity, *auctoritas* was seen as the individual clout, experience and ability to influence

Another important assumption underlying the model is that neither the powers of a particular office nor the personal influence of a particular individual change over time. This assumption is of course never fully satisfied. Individuals gradually gather experience and influence over time, can suddenly be out of favour or end up embroiled in a scandal, gaining or losing their personal clout. This is a strong restriction on the model that allows us to estimate the quantity of interest, namely the overall level of regime deinstitutionalisation. We can, however, relax this assumption and assume a linear time trend for each individual and each office in terms of their latent influence scores. While this does not capture idiosyncratic variations over time, it does allow for the capture of the gradual loss or gain of influence of particular individuals or offices. In real-life politics, personal effects are certainly neither constant nor linear, they fluctuate, often dramatically. Some of these variations will be reflected in personal approval ratings, and we do find in the appendix that the latter contribute to the explanation of individual influence. The trend over time is modelled as a random coefficient, such that the change over time differs by person and by office:

$$SCORE_{it} = \beta_0 + \beta_1 \eta_{j_{it}}^O + \gamma_{j_{it}}^O t + \beta_2 \eta_i^P + \gamma_i^P t + \beta_3 \tau_t + \varepsilon_{it} \tag{4}$$

When we allow the time trend to vary randomly across individual officeholders as well as offices, we obtain the ζ-ratio that is still greater than one but much diminished relative to the original model, but the interpretation of the ζ-ratio is not clear in this model, since the calculation of the ratio ignores the time trend itself. Regardless of the calculation of the ζ-ratio, however, the

policies. In contrast, the power of office was referred to as *potestas* or *imperium*. Consuls had *auctoritas* before being elected but they gained *potestas* only after assuming office (Mommsen 1952, 1034, note 1.)

fact that the coefficient for the latent officeholder variable changes substantially relative to that for office suggests that incorporating a broader conception of personal influence into the model will likely lead to a stronger relative impact of personal influence, and therefore the estimated degree of deinstitutionalisation.

In general, making a number of restricting assumptions allows us to estimate the latent variables and their relative importance on average. Estimating models in which we allow a linear time trend to vary across individuals does change the estimate of the ζ-ratio, with the officeholder becoming more important, while varying time trends for offices does not affect our main result. The supplementary materials, in addition to details about the data, coding rules and tests of the expert survey validity, include several alternative model specifications that address the assumptions discussed in this section.

Conclusions

There is a very old research programme that is concerned with the attempt to separate personal from institutional components of political influence. Indeed, Machiavelli who recalled the debate among ancient Romans as to whether it was the office of dictatorship alone that led to tyranny in Rome, argued himself that Caesar would still have succeeded under some other rank because "it is easy for force to acquire a title, but not for the title to acquire force" (Machiavelli 2003 [1513–19], 194). Because of the numerous factors, often endogenous, that impact on how political influence depends on the formal powers of office along with personal standing and traits (*office* and *officeholder*), these two components are almost impossible to disentangle. By leveraging a uniquely fine-grained dataset and making a number of restrictive assumptions, we are able to statistically estimate the

relative importance of office and individual in Russia and, additionally, in Ukraine.

This paper provides a new tool for measuring the relative importance of different sources of power, closely related to the level of regime institutionalisation. Looking at the ζ-ratio for the Russian political elite, we find that office dominates officeholder, roughly by the order of two. This finding holds for Russia under the Yeltsin presidency as well as under Putin and Medvedev despite the fact that Russia changed dramatically between 1994 and 2011. The analysis of Ukrainian data shows similar patterns. These results clearly indicate that in hybrid regimes such as Russia and Ukraine, the degree of deinstitutionalisation is moderate. While personal attributes and patronage networks matter significantly in determining individual influence on policy, the formal powers of the office occupied are still more important.

Many nations suffer from significant deinstitutionalisation and the simultaneous development of personalism (Hadenius and Teorell, 2007, 145); scholars often turn to subjective assessments of deinstitutionalisation or make their inferences from the existence of particular institutions. Results obtained in this paper are certainly limited to Russia and Ukraine, however these results, and the method that underpins them, will be of interest to comparativists who study the strength of institutions across the world. Further research should establish whether this model can be used on different measures of political influence and whether such analysis will lead to similar results in different contexts. Likewise, our modelling strategy disentangles only time-invariant aspects of personal influence. Future research should address whether short-term fluctuations in the individual's political standing can be accounted for so that personal and institutional sources of influence can be reliably estimated under different assumptions.

Acknowledgements

References

Acemoglu, Daron, James Robinson and Simon Johnson. 2001. "The Colonial Origins of Comparative Development: An Empirical Investigation." *American Economic Review* 91:1369–1401.

Ahlquist, John and Margaret Levi. 2011. "Leadership: What It Means, What It Does, and What We Want to Know About It." *Annual Review of Political Science* 14:1–24.

Baturo, Alexander. 2010. "The Stakes of Losing Office, Term Limits and Democracy." *British Journal of Political Science* 40(3):635–62.

Baturo, Alexander and Slava Mikhaylov. 2013. "Life of Brian Revisited: Assessing Informational and Non-Informational Leadership Tools." *Political Science Research and Method* 1(1):139–57.

Benoit, Kenneth and Michael Laver. 2006. *Party Policy in Modern Democracies*. London: Routledge.

Blalock, Hubert M. 1961. "Evaluating the Relative Importance of Variables." *Americal Sociological Review* 26(6):866–74.

Bueno de Mesquita, Bruce, Alastair Smith, Randolph Siverson and James Morrow. 2003. *The Logic of Political Survival*. Cambridge, Mass.: MIT Press.

Bunce, Valerie. 1981. *Do New Leaders Make a Difference: Executive Succession and Public Policy under Capitalism and Socialism*. Princeton: Princeton University Press.

Canes-Wrone, Brandice. 2006. *Who Leads Whom? Presidents, Policy, and the Public*. Chicago: University of Chicago Press.

Chehabi, Houchang and Juan Linz. 1998. *Sultanistic Regimes*. Baltimore: Johns Hopkins University Press.

Cheibub, Jose, Jennifer Gandhi and James Vreeland. 2010. "Democracy and Dictatorship Revisited." *Public Choice* 143(2):67–101.

Dewan, Torun and David Myatt. 2008. "The Qualities of Leadership: Direction, Communication, and Obfuscation." *American Political Science Review* 102(3):351–68.

Dreher, Axel, Sarah Lein, Michael Lamla and Frank Somogyi. 2009. "The Impact of Politicans' Profession and Education on Reforms." *Journal of Comparative Economics* 37(1):169–93.

Gandhi, Jennifer. 2008. *Political Institutions under Dictatorship*. Cambridge; New York: Cambridge University Press.

Geddes, Barbara. 1999. "What Do We Know about Democratization after Twenty Years?" *Annual Review of Political Science* 2:115–44.

Goemans, Hein, Kristian Gleditsch and Giacomo Chiozza. 2009. "Introducing Archigos: A Data Set of Political Leaders." *Journal of Peace Research* 46:269–283.

Hadenius, Axel and Jan Teorell. 2007. "Pathways from Authoritarianism." *Journal of Democracy* 18(1):143–57.

Hale, Henry. 2005. "Regime Cycles: Democracy, Autocracy, and Revolution in Post-Soviet Eurasia." *World Politics* 58(1):133–65.

Heidelberger, Philip and Peter Welch. 1983. "Simulation Run Length Control in the Presence of an Initial Transient." *Operations Research* 31(6):1109–44.

Helmke, Gretchen and Steven Levitsky. 2006. *Informal Institutions and Democracy: Lessons from Latin America*. Baltimore, MD: Johns Hopkins University Press.

Hermann, Margaret and Charles Kegley. 1995. "Rethinking Democracy and International Peace: Perspectives from Political Psychology." *International Studies Quarterly* 39(4):511–33.

Horowitz, Michael and Allan Stam. forthcoming. "How Prior Military Experience Influences The Future Militarized Behavior of Leaders." *International Organization* .

Humphreys, Macartan, William Masters and Martin Sandbu. 2006. "The Role of Leaders in Democratic Deliberations Results from a Field Experiment in Sao Tome and Principe." *World Politics* 58(4):583–622.

Hunter, Floyd. 1953. *Community Power Structure: A Study of Decision Makers*. Chapel Hill: The University of North Carolina.

Huntington, Samuel. 1968. *Political Order in Changing Societies*. New Haven: Yale University Press.

Jones, Benjamin and Benjamin Olken. 2009. "Hit or Miss? The Effect of Assassinations on Institutions and War." *American Economic Journal: Macroeconomics* 1(2):55–87.

Kinsbursky, Alexander. 2003. "Russian Political Elite Structural Transformation in Expert Opinion [In Russian: Transformaciya Struktury Rossijskoj Politicheskoj Elity v Ocenkah Expertov]." *Sociologicheskie Issledovaniya* 9(91–94).

Kryshtanovskaya, Olga. 2002. "Transformation of Russian Business Elite: 1998-2002 [In Russian: Transformaciya Buznes-Elity Rossii: 1998-2002]." *Sociologicheskie Issledovaniya* 8:17–49.

Machiavelli, Niccolo. 2003. *The Discourses*. [1513-19] London: Penguine Books.

March, James and Johan Olsen. 2006. Elaborating the 'New Institutionalism'. In *The Oxford Handbook of Political Institutions*, ed. Sarah Binder Rhodes, R. A. W. and Bert Rockman. Oxford: Oxford University Press pp. 3–22.

Meyer, Mary and Jane Booker. 2001. *Eliciting and Analyzing Expert Judgment: A Practical Guide, Asa-Siam Series on Statistics and Applied Probability*. Philadelphia: Society for Industrial and Applied Mathematics and American Statistical Association.

Mommsen, Theodor. 1952. *Römisches Staatsrecht III*. Graz: Akademische Druck und Verlagsanstalt.

North, Douglass. 1990. *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press.

Northouse, Peter G. 2009. *Leadership: Theory and Practice*. 5th ed ed. London: Sage Publications.

O'Donnell, Guillermo. 1996. "Illusions about Consolidation." *Journal of Democracy* 7(2):34–51.

O'Malley, Eoin. 2007. "The Power of Prime Ministers: Results of an Expert Survey." *International Political Science Review* 28(7):7–27.

Patty, John and Roberto Weber. 2007. "Letting the Good Times Roll: A Theory of Voter Inference and Experimental Evidence." *Public Choice* 130:293–310.

Petrov, Nikolay. 2011. "Russia Before the Storm: More Politics, Less Stability." *Carnegie Moscow Center Briefing Paper* 13(1):1–24.

Polsby, Nelson. 1963. *Community Power and Political Theory*. New Haven, CT: Yale University Press.

Przeworski, Adam. 2004. "The Last Instance: Are Institutions the Primary Cause of Economic Development?" *European Journal of Sociology* 45(2):165–88.

Quinn, Kevin. 2004. "Bayesian Factor Analysis for Mixed Ordinal and Continuous Responses." *Political Analysis* 12:338–53.

Reckase, Mark. 1997. "The Past and Future of Multidimentional Item-Response Theory." *Applied Psychological Measurements* 21(1):25–36.

Remington, Thomas and John Ora Reuter. 2009. "Dominant Party Regimes and the Commitment Problem: the Case of United Russia." *Comparative Political Studies* 42:501–26.

Rose, Richard. 1991. "Prime Ministers in Parliamentary Democracies." *West European Politics* 14(2):9–24.

Sakwa, Richard. 2011. *The Crisis of Russian Democracy: The Dual State, Factionalism and the Medvedev Succession*. Cambridge: Cambridge University Press.

Shamir, Boas. 2012. Leadership in Context and Context in Leadership Studies. In *The Oxford Handbook of Leadership*, ed. Michael Rumsey. Oxford: Oxford University Press pp. 343–55.

Sheffer, Gabriel. 1993. Introduction: In Search of Innovative Leadership in World Politics. In *Innovative Leaders in International Politics*. Albany: State University of New York Press pp. vii–xviii.

Sheinis, Victor. 2004. "Spiral Motion: Transformation of the Russian Parliament [In Russian: Dvizhenie po Spirali: Prevraschenija Rossiyskogo Parlamenta]." *Obshchestvennye Nauki i Sovremennost'* 5:43–52.

Stogdill, Ralph. 1948. "Personal Factors Associated with Leadership: A Survey of the Literature." *The Journal of Psychology: Interdisciplinary and Applied* 25(1):35–71.

Treier, Shawn and Simon Jackman. 2008. "Democracy as a Latent Variable." *American Journal of Political Science* 52(1):201–17.

Weber, Max. 1978. *Economy and Society*. [1918] Berkeley: University of California Press.

Wright, Joseph. 2008. "Do Authoritarian Institutions Constrain? How Legislatures Affect Economic Growth and Investment." *American Journal of Political Science* 52(2):322–43.

Brief biographical statement

Alexander Baturo is a Lecturer in International Relations at Dublin City University, Ireland.

Johan A. Elkink is a Lecturer in Social Science Research Methods at University College Dublin, Ireland.

	raw score							log of rank	
								Russia	Ukraine
	1	2	3	4	5	6	7	8	9
	1994–2011	1994–99	2000–2011	1994–2003	2004–11	1994–2011	1994–2011	2004–2011	2003–2013
Intercept (β_0)	-0.23	-0.18	0.17	-0.14	-0.24	-0.18	0.49	3.61	3.42
	(0.07)	(0.12)	(0.09)	(0.09)	(0.11)	(0.07)	(0.08)	(0.03)	(0.04)
Office (β_1)	1.08	1.14	0.98	1.11	0.93	1.05	1.26	0.89	0.68
	(0.11)	(0.11)	(0.11)	(0.11)	(0.11)	(0.12)	(0.15)	(0.08)	(0.09)
Officeholder (β_2)	0.54	0.59	0.57	0.55	0.63	0.56	1.07	0.65	0.51
	(0.02)	(0.03)	(0.03)	(0.02)	(0.04)	(0.02)	(0.08)	(0.04)	(0.03)
Patron (β_3)	–	–	–	–	–	0.03	–	–	–
						(0.01)			
Cubic spline (β_4)	1.09	1.12	0.97	1.09	1.06	1.08	0.89	–	–
	(0.02)	(0.03)	(0.02)	(0.03)	(0.03)	(0.02)	(0.02)		
ζ-ratio (β_1/β_2)	1.99	1.94	1.73	2.04	1.49	1.87	1.18	1.37	1.35
	(0.22)	(0.22)	(0.19)	(0.21)	(0.19)	(0.22)	(0.14)	(0.12)	(0.21)
σ_ε^2	0.50	0.55	0.40	0.53	0.34	0.50	0.42	0.33	0.49
	(0.003)	(0.005)	(0.003)	(0.004)	(0.003)	(0.003)	(0.002)	(0.003)	(0.016)
N	16,562	5,292	11,270	9,298	7,264	13,704	16,562	7,264	717
Months	(197 months)	(62 months)	(135 months)	(110 months)	(87 months)	(196 months)	(197 months)	(87 months)	(11 years)

Table 1: *Estimates of* Office *and* Officeholder. Note: Estimated coefficients for the latent variable model (Eq. 1). Model 6 additionally includes lagged *Patron* scores (Eq. 3). Model 7 allows for random time trends (Eq. 4). Models 1–7 are estimated with the raw scores of individual influence as the dependent variable. Models 8–9 are estimated with the log-transformed ranks as the dependent variable on the full Russian sample (8) and on supplementary data from Ukraine (9).

Effective leader	Nominal leader
party's general-secretary–nominal leader pairs (103)	
party's general-secretary (57)	prime minister or premier (91)
	chairman of the (collective) presidency (10)
	other (president of revolutionary council) (2)
"national leader"–nominal leader pairs (40)	
"national leader" (23)	president (19)
	prime minister (7)
	other (king, secretary of gen. people's committee (14)
military ruler–nominal leader pairs (31)	
military ruler (22)	president (22)
	prime minister (2)
	other (e.g., military council) 7
prime minister–nominal leader pairs (11)	
prime minister (8)	king (7)
	president (2)
	other (e.g., president of presidium) (2)
other ruler–nominal leader pairs (11)	
other (7)	president (8)
	king (2)
	prime minister (1)
(117)	(196)

Table 2: *Nominal and Effective Heads of Government, 1946–2008.* Note: Estimates are based on the Democracy and Dictatorship dataset (Cheibub, Gandhi and Vreeland, 2010). The original titles are aggregated in this table into a smaller number of categories; we omit instances of foreign occupation. "National leaders" typically do not occupy formal office albeit they often have exalted titles, for example, the Leader of the Revolution or the paramount leader. The category of military rulers includes heads of the military, National Guard, military intelligence and collective military rulerships. Other effective leaders are regents, religious leaders, heads of subnational units and cabinet ministers. Also, the original dataset codes the nominal head of government rather than that of state. In many cases, for example, presidential regimes, this is justified. In communist regimes, the constitutional head of state is typically the chairman of the presidium of the Supreme Soviet (USSR) or the chairman of the PRC (China). The *de facto* national leaders — almost always their party's general secretaries — typically installed their loyalists as the heads of state and government. Occasionally, rulers opted to keep the post of the head of state for themselves (e.g. in USSR from 1977–85 and 1988–89). Thus, the effective-nominal heads of state pairs differ slightly from the effective-nominal heads of government pairs, for example, ten instead of eight pairs in the case of China.
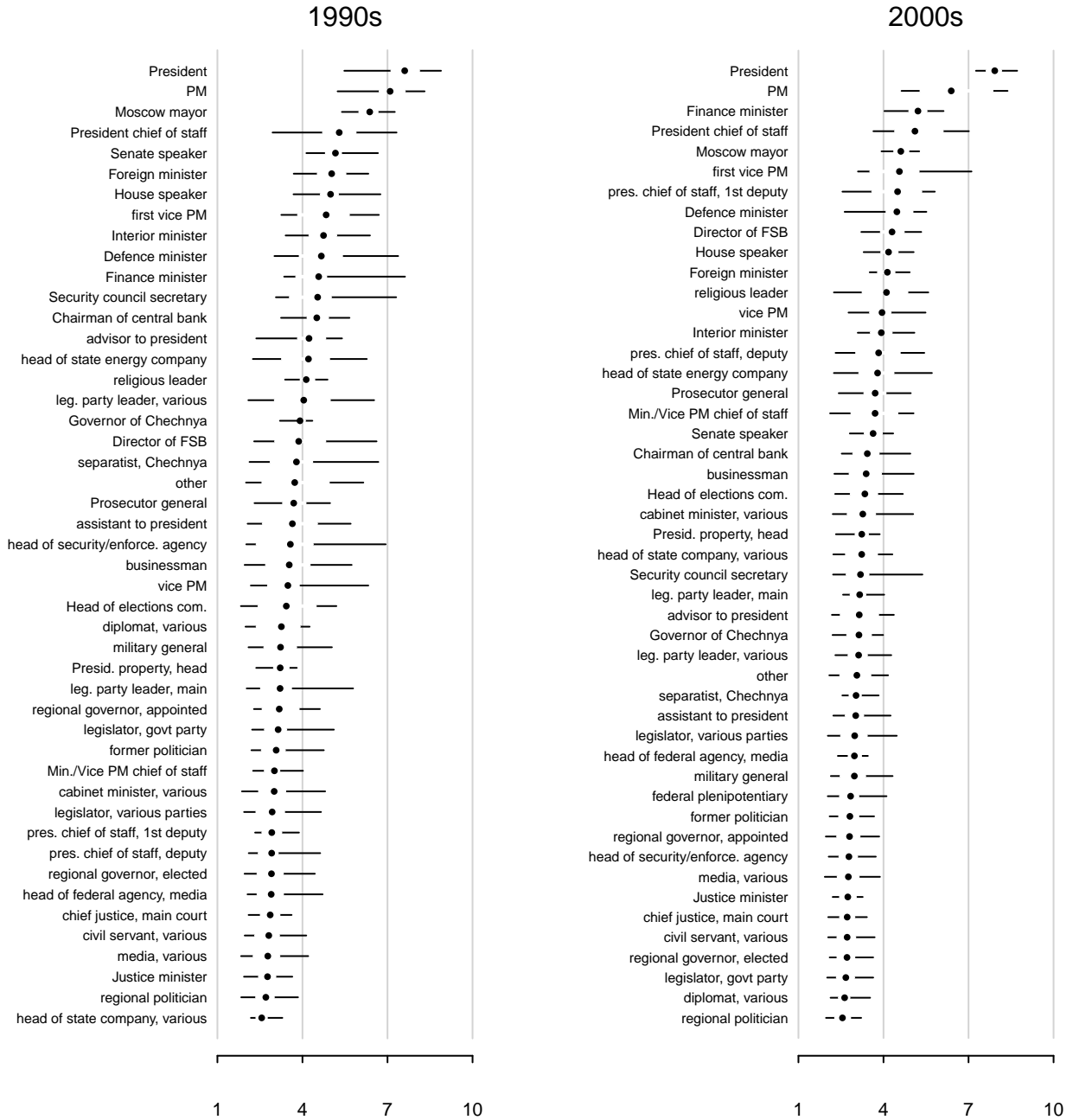
Figure 1: *Average Influence of Political Office, 1994–2011*. Note: Empty space between lines contains 50 per cent of the distribution, median value in the middle. Lines extend to the lowest and highest values of scores, excluding outliers. Political influence ranges on an interval scale between 1 and 10, raw scores are from VP-T. Single office (occupied by one officeholder at any particular time) is denoted by capitalised first letters.
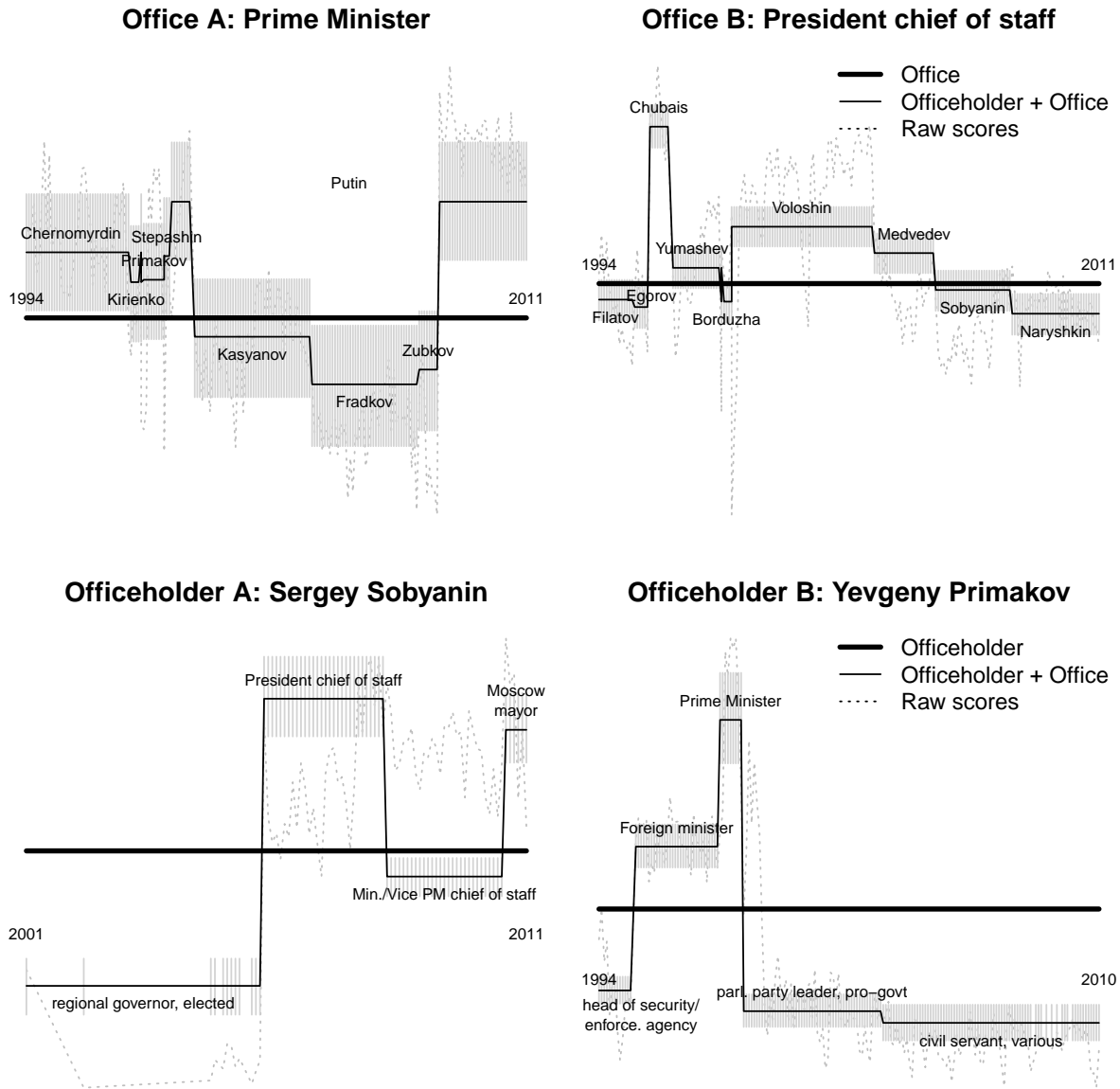
Office A: Prime Minister

Office B: President chief of staff

Office
Officeholder + Office
Raw scores

Chubais

Chernomyrdin   Stepashin
            Primakov
1994   Putin
        Kirienko   2011

            Kasyanov   Zubkov

                Fradkov

Yumashev   Voloshin   Medvedev
1994   2011
Filatov   Egorov   Borduzha   Sobyanin
                                Naryshkin

Officeholder A: Sergey Sobyanin

Officeholder B: Yevgeny Primakov

Officeholder
Officeholder + Office
Raw scores

President chief of staff   Moscow
                                mayor

2001   2011

        regional governor, elected

                Min./Vice PM chief of staff

Prime Minister

Foreign minister

1994   2010
head of security/   parl. party leader, pro–govt
enforce. agency
                    civil servant, various

Figure 2: *Relative Impact of Office and Officeholder, for Selected Offices and Individuals*. Note: The thin solid lines represent the sum of office- and officeholder-derived influence, with 95% confidence intervals based on simulated parameters in light grey. The dotted line represents the residuals of regressing the raw influence scores on the cubic time spline. These influence scores are scaled such that 10% of the values fall outside the plot, in order to remove outliers. Therefore, only the trend over time, not the precise location, can be interpreted.