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International Sanctions and Autocrats' Duration

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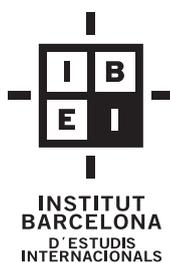
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Abstract: This paper enquires into whether economic sanctions are effective in destabilizing authoritarian rulers. We argue that this effect is mediated by the type of authoritarian regime against which sanctions are imposed. Thus, personalist regimes and monarchies, which are more dependent on aid and resource rents to maintain their patronage networks, are more likely to be affected by sanctions. In contrast, single-party and military regimes are able to maintain (and even increase) their tax revenues and to reallocate their expenditures and so increase their levels of cooptation. Data on sanction episodes, authoritarian rulers and regimes covering the period 1946–2000 have allowed us to test our hypotheses. To do so, duration models have been run, and the results confirm that personalist autocrats are more vulnerable to foreign pressure. Concretely, the analysis of the modes of exit reveals that sanctions increase the likelihood of an irregular change of ruler, such as a coup. Sanctions are basically ineffective when targeting single-party or military regimes.

Key words: Dictatorship, Leaders, Economic Sanctions, Stability, Foreign Pressure

1. Introduction

During his inaugural address in 2005, US President George W. Bush proclaimed that 'it is the policy of the United States to seek and support the growth of democratic movements and institutions in every nation and culture, with the ultimate goal of ending tyranny in our world'. The general goal of ending tyranny is crystal clear and has been shared by many of Western advanced democracies since the end of the Second World War. Yet what remain under discussion and subject to deep controversy are the means to be used to pursue that goal and, once applied, their degree of effectiveness.

Democratic governments have tried to influence and shape the institutional framework of foreign countries in a number of ways. One way is full military intervention and invasion. Thus, the victorious allies imposed a democratic constitution on Japan after the Second World War; and at this time the United States is still struggling to consolidate the weak new institutional system in Iraq after the 2003 invasion. In a more subtle manner, developed democracies have provided some domestic opposition movements with financial and strategic support. For instance, the Anti-apartheid Movement, founded in London in 1959, was created by South African exiles and their supporters to mobilize international support for the African National Congress and the Pan Africanist Congress. Solidarity, the union that headed the anti-communist opposition in Poland, was financially aided by American trade unions; at the same time, international agencies refused to grant Poland any economic aid until it legalized Solidarity. Examples abound at the state level as well. The US administration had been both training and funding Iraqi anti-Saddam groups such as the Iraqi National Accord[1] and the Iraqi National Congress before the 2003 invasion[2]. In Europe, the well-known Friedrich Ebert Foundation 'provided financial and other support for Socialist politicians during dictatorships in Spain and Portugal' (Pinto-Duschinsky 1991: 55).

Nonetheless, the most commonly used and visible way whereby democracies have attempted to bring about a policy or institutional change in authoritarian regimes is to impose economic sanctions. Indeed, as Askari et al. (2003) report, while there were only 12 cases of sanctions between 1914 and 1945, the number increased to about 50 during the 1990s. Most of the targets of these economic sanctions are authoritarian regimes. In particular, Kaempfer, Lowenberg and Mertens (2004) reveal that in 2001 85 percent of US unilateral sanctions targets were countries rated as 'not free' or just 'partly free' by Freedom House.

However, the efficacy of such measures is still open to discussion and doubt among scholars (van Bergeijk 1989; Haass 1997; Mueller and Mueller 1999; Nurnberger 2003). This paper seeks to give an answer to the following questions: Are sanctions an effectual strategy to destabilize dictatorial rulers? Are all kinds of autocrat equally sensitive to economic coercion? To do so we proceed as follows: Section 2 reviews the

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1. Funded by the Central Intelligence Agency, British intelligence, and the Saudis, the INA staged a failed coup attempt in 1996.
2. The INC had received millions of dollars in American aid for military training.

literature on autocrats' stability, focusing on the strategies at their disposal, namely, repression and buying loyalty. Section 3 discusses the potential impact of international sanctions on dictators' survival and any mediating effect of the type of regime in place, and proposes some testable hypotheses. Section 4 presents the dependent and independent variables, their sources and the methodology employed to estimate the duration models. In Section 5 we report and discuss the results of the multivariate analyses. Finally, Section 6 summarizes the main findings.

2. Authoritarian Strategies to Retain Power

The early literature on non-democratic regimes tended to focus on repression as the main instrument to retain power, predominantly theorizing about the coercive and control capabilities – and strategies – of different types of regime. Much of this literature was basically driven by the turning point in the topic that the emergence of the European totalitarian systems represented (see Arendt 1951; Friedrich and Brzezinski 1961; Schapiro 1972).

Although common sense may lead us to think of dictatorships as basically characterized by repression, fear and even brutality, the truth is that no dictator can survive only by means of sticks. A second branch of studies on authoritarianism, principally from the economics field (going back to Tullock, 1987) began to systematically analyze the trade-offs that dictators face once in power and their sources of threat. The focus turned from repression to buying loyalty and the combination of these two strategies. All in all, dictators use a combination of cooptation and repression to lengthen their tenure (Wintrobe 1990; 1998; Gershenson and Grossman 2001; Gandhi and Przeworski 2006).

Through cooptation rulers decrease the probability of an upheaval by fragmenting potentially threatening political groups (Bertocchi and Spagat 2001). Hence, dictators do not rule in complete isolation; they build around them a supporting coalition (Bueno de Mesquita et al. 2003; Gallego and Pitchik 1999) whose loyalty is largely dependent on obtaining patronage resources (Gibson and Hoffman 2002). As Brough and Kimenyi emphasize, 'to keep the coalition intact, it is necessary for the dictator to distribute benefits to the coalition' (1986: 46).

Bueno de Mesquita et al. (2003) further study this latter strategy and distinguish between private and public goods in order to understand political survival. They argue that, on the one hand, private goods (namely, access to graft, bribes, privileges, etc.) are allocated exclusively to the members of the winning coalition[3]. On the other hand, public goods (such as economic growth, public policies, etc.) are delivered to all citizens or to a broad cross-section of the population. The mixture of variables capturing both types of good pervades the empirical literature on authoritarian rulers and

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3. Those whose support is fundamental for the incumbent to retain power.

regime survival. For instance, the availability of natural resources is found to increase duration both of leaders (Escribà-Folch 2007) and of regimes (Smith 2004; Ulfelder 2007). Moreover, the exemption from having to rely on costly taxation is argued to reduce the degree of accountability to which these governments may be subject (Brautigam 2000). More concretely, Morrison (2007) shows that non-tax revenues are related to a lower likelihood of dictatorial regime change[4].

These conclusions make it possible to explain the common finding that economic growth stabilizes leadership, and, under some circumstances, authoritarian regimes. From a good-delivery perspective, increased welfare constitutes a form of public good that benefits the general population (Bueno de Mesquita et al. 2003). Conversely, economic downturns are proven to exert a destabilizing effect by augmenting the risks of a coup[5]. As for popular uprisings, according to relative deprivation theory, social frustration leads to political dissent and violence when the outcomes experienced by individuals are inferior to those that they expected to receive or felt that they were entitled to receive[6]. Besides, from a rationalistic perspective, growth is argued to increase the costs of participating in insurgency activities (Grossman 1991). Economic growth is then generally found to lengthen authoritarian rulers' tenure (Margalit 2005; Escribà-Folch 2007; Frantz 2007).

On the other hand, some authors have examined how the institutional structure of authoritarian regimes may affect the structure of incentives facing the political actors and, hence, shape the vulnerability of the ruler and the regime itself. For instance, the number of parties within a legislature is found to have a positive impact on dictators' stability in power as cooperation is mobilized through the use of policy concessions (Gandhi and Przeworski 2007). Based on an alternative classification of authoritarian regimes, Geddes (1999; 2004) argues that the interests of the elites and the forms of factionalism within military, single-party and personalist regimes: in military regimes, 'because most officers value the unity and capacity of the military institution more than they value holding office, they cling less tightly to power than do office holders in other forms of authoritarianism' (2004: 26). Conversely, in single-party regimes all factions within the regime have incentives to cooperate with the aim of remaining in office. Furthermore, party organizations, as noted above, provide party members with a durable framework wherein to resolve differences, bargain and advance in influence. As a result, dominant party systems generate and maintain a cohesive leadership cadre (Brownlee 2004). In Smith's words,

> *during 'routine' periods, strong parties provide a means for incorporated groups to present their political and policy preferences to the regime, channelling interests in much the same way that Huntington foresaw in the single-party rule of the 1960s. During periods of crisis, the crucial task of party institutions is to provide a credible guarantee to in-groups that their long-term interests will be best served by remaining loyal to the regime.* (2005: 431)

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4.   As can be noticed, most of the work on authoritarian breakdowns has taken *regimes* and not *leaders* as the unit of analysis.
5.   See, among others, Johnson, Slater and McGowan (1984), O'Kane (1981; 1993), Londregan and Poole (1990), and Galetovic and Sanhueza (2000).
6.   See, for instance, Feierabend, Feierabend and Gurr (1972) and Dudley and Miller (1998).

Under personalist regimes, rival factions will remain loyal only if the pay-off from supporting the ruler exceeds the expected benefits of a risky plot, since 'in contrast to single-party regimes, the leader's faction in a personalist regime may actually increase benefits to itself by excluding the rival faction from participation' (Geddes 2004: 14). According to Jackson and Rosberg, under personal rule 'the system favors the ruler and his allies and clients: its essential activity involves gaining access to a personal regime's patronage or displacing the ruler and perhaps his regime and installing another' (1984: 424). Consequently, single-party regimes are often found to be the most long-lasting type of authoritarian rule, and military systems the most intrinsically fragile (Brownlee 2004; 2007; Geddes 1999; 2004)[7]. Nevertheless, the logic is alleged to be quite different when the focus moves from regimes to authoritarian leaders. According to Frantz (2007), leaders in single-party and military regimes face a higher probability of a coup for two specific reasons: there already exists an institution that facilitates elite coordination, and these elites have greater control over the security apparatus.

3. Sanctions, Patronage and Repression

Recent evidence has revealed the central impact that the international context exerts on the stability of political regimes and the prospects of democratization. For example, Gleditsch and Ward (2006) find that the likelihood of a transition to democracy is highly influenced by diffusion processes. As for the specific role of coercion, Marinov (2005) shows that economic sanctions are effective in destabilizing country rulers, especially in democratic regimes; however, the results are quite inconclusive in the case of non-democracies. Similarly, Lektzian and Souva (2007) find that economic sanctions are less likely to be effective when targeting non-democratic regimes, for two basic reasons. First, sanctions produce rents that autocrats use to hold on to power; and second, as authoritarian governments rely on small winning coalitions, it is less likely that its members will bear the costs of international coercion. Yet again in this case (as has been common in comparative politics studies) the category of non-democratic regimes remains oversimplified. Concretely, no distinction is made between types of authoritarian regime, so the alternative logics of intra-elite relations and survival strategies detailed in the previous section are completely neglected. If it is true that 'the effect of significant economic punishment is conditional on the target's regime type', as Lektzian and Souva (2007: 854) affirm, then the statement could be also applied to authoritarian regime types. Therefore, the effect of sanctions on dictatorial leaders' duration in power could also be mediated by regime type, such as personalist, military and single-party systems. The aim of this paper is to test this proposition by theorizing about the mechanisms through which economic sanctions may destabilize authoritarian leaders. In fact, it has already been shown that authoritarian regime types mediate the impact of variables such as growth and contentious collective action on the likelihood of regime breakdown (Geddes 2004; Ulfelder 2005).

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7. See Smith (2005) for a discussion.

The argument about rent creation and appropriation in the event of sanctions has been developed by Kaempfer, Lowenberg and Mertens (2004), who, departing from Wintrobe's (1998) well-known model, assume that sanctions make the size of the dictator's budget grow – as he is able to capture the rents associated with trade restrictions – and hence focus on the effect of sanctions on the level of opposition to the regime. According to them, if sanctions increase the capacity of the opposition, then they may reduce the budget of the dictator and increase the price of repression. If, besides, the price of loyalty rises, the power of the dictator will be reduced; if not, the effect of sanctions is indeterminate. In contrast, in a second scenario, if sanctions have little effect on the strength of the opposition, and if, besides, the price of loyalty falls, then authoritarian rulers' levels of repression, loyalty and, hence, power would increase[8]. If the price of loyalty rises, repression would increase, but power in general would probably remain unaffected.

In a much simpler setting which considers the effect of foreign pressure on the elite's probability of remaining in power, Gershenson and Grossman (2001) show that an increase in such pressure would lead the ruling elite to increase the levels of both repression and cooptation.

The question remaining is, then, how we can reconcile these general predictions with the existing differences between regime types, their cooptation and repression capacities, and their elite interests. The strong assumption that dictators are able to capture the rents associated with economic sanctions may not apply to all kinds of regime or may not be enough to compensate the losses inflicted on other revenue streams. In fact, Dashti-Gibson, Davis and Radcliff (1997) find that, for those sanctions primarily designed for destabilization and punishment, the higher the cost to the target (as a percentage of its GNP) is, the greater is the predicted likelihood of success. All in all, the heart of the matter may be the relative capacity of each regime/ruler type to vary its level of cooptation (loyalty) and repression in the event of international pressure and coercion.

As for personalist regimes, Ulfelder correctly remarks that their durability 'depends largely on bargains among cliques with no claim to grass roots, so ruling elites are freer to ignore popular challenges' (2005: 314). These neo-patrimonial regimes are basically sustained by extensive patronage networks – as noted above – so they become enormously dependent on the availability of resources to buy the loyalty of their supporting elites. Outsiders are kept demobilized and repressed. The exclusive and kleptocratic nature of these regimes prevents the development of an effective and broad administration able to collect tax revenues, as their main revenue streams – namely, non-tax revenues, taxes on international trade and foreign aid – are principally external and do not require citizen cooperation (Lieberman 2002)[9]. Under such

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8. An increase in the government's power could be also interpreted as an increase in its stability.
9. For instance, between 1960 and 2000 the average foreign aid per capita has been 28.59 dollars for personalist and monarchic regimes, 25.72 dollars for single-party systems and just 13.3 dollars for military regimes. If we include mixed cases according to the pure type they most seem to resemble, personalist regimes (monarchies plus personalist) have received on average 31.6 dollars in aid per capita; single-party (pure types plus personalist/single-party hybrids and single-party/military) received 26.8 dollars, and military regimes (military plus military/personalist) just 21.2 dollars.

circumstances, the choices available to a personalist ruler may be quite limited in the event of sanctions. An increase in repression – or in the logic of terror, in Haber's (2006) terms – may be counterproductive as, given that most of the population is already excluded from the political process, the perception that repression may extend to a member of the already narrow supporting coalition can sharply increase (Gershenson and Grossman 2001). If the incumbent ruler is not able to capture sanction rents due to his extremely limited state capacity (or if these rents do not compensate the loss inflicted by the imposition of sanctions), a dramatic cut in the flow of benefits can decrease the elites' utility from supporting the ruler and augment their expected utility from defection. In fact, as Kaempfer and Lowenberg assert, 'the sanctions which are most likely to precipitate the desired political change in the target country are those which concentrate income losses on groups benefiting from the target government's policy' (1988: 792). In this vein, Van de Walle points out that, in Africa, the restrictions on aid flows brought about regime instability: 'with fewer resources at their disposal and an increasingly decrepit state apparatus, leaders found it harder to sustain critical clientelist networks, with the result that the old political aristocracy was more likely to fractionalize' (2001: 240). Similarly, Gibson and Hoffman argue, for the African case as well, that 'domestic and international factors in the late 1980s and early 1990s combined to inhibit rulers' supply of patronage resources, reducing their ability to support their followers and buy off their opponents' (2002: 2–3). In sum, it can be argued that personalist rulers are more dependent on patronage rents and clientelism than other autocrats, and, moreover, their supporting coalitions are the smallest. A dramatic cut in the expected benefits of supporting the incumbent leader may bring about elite defection since 'its essential activity involves gaining access to a personal regime's patronage or displacing the ruler and perhaps his regime and installing another' (Jackson and Rosberg 1984: 424), as cited above. Foreign pressure might then trigger, as Gleditsch and Ward (2006) suggest, a change in the distribution of power and preferences among important actors and groups.

In contrast, the stability of leaders in single-party and military regimes is not as dependent on rent-delivery and patronage as that of personalist regimes and monarchies. As detailed in the previous section, in single-party systems loyalty is mobilized through limited access to the decision-making process and policy concessions. Moreover, especially within one-party regimes, large sectors of the population can be integrated in what Kasza calls 'administered mass organizations' that are 'formal organizations structured and managed by the state's ruling apparatus to shape mass social action for the purpose of implementing public policy' (1995a: 218). These organizations extend state control in many different ways, namely, material dependency, consumption of time, organization of support, offices and honours and self-directed local administration (Kasza, 1995a)[10]. Military regimes also have an especially great capacity to increase repression and societal control.

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10. See Kasza (1995a; 1995b) for more details.

Figure 1. Revenue composition (as a % of GDP), aid per capita, regime type and economic sanctions
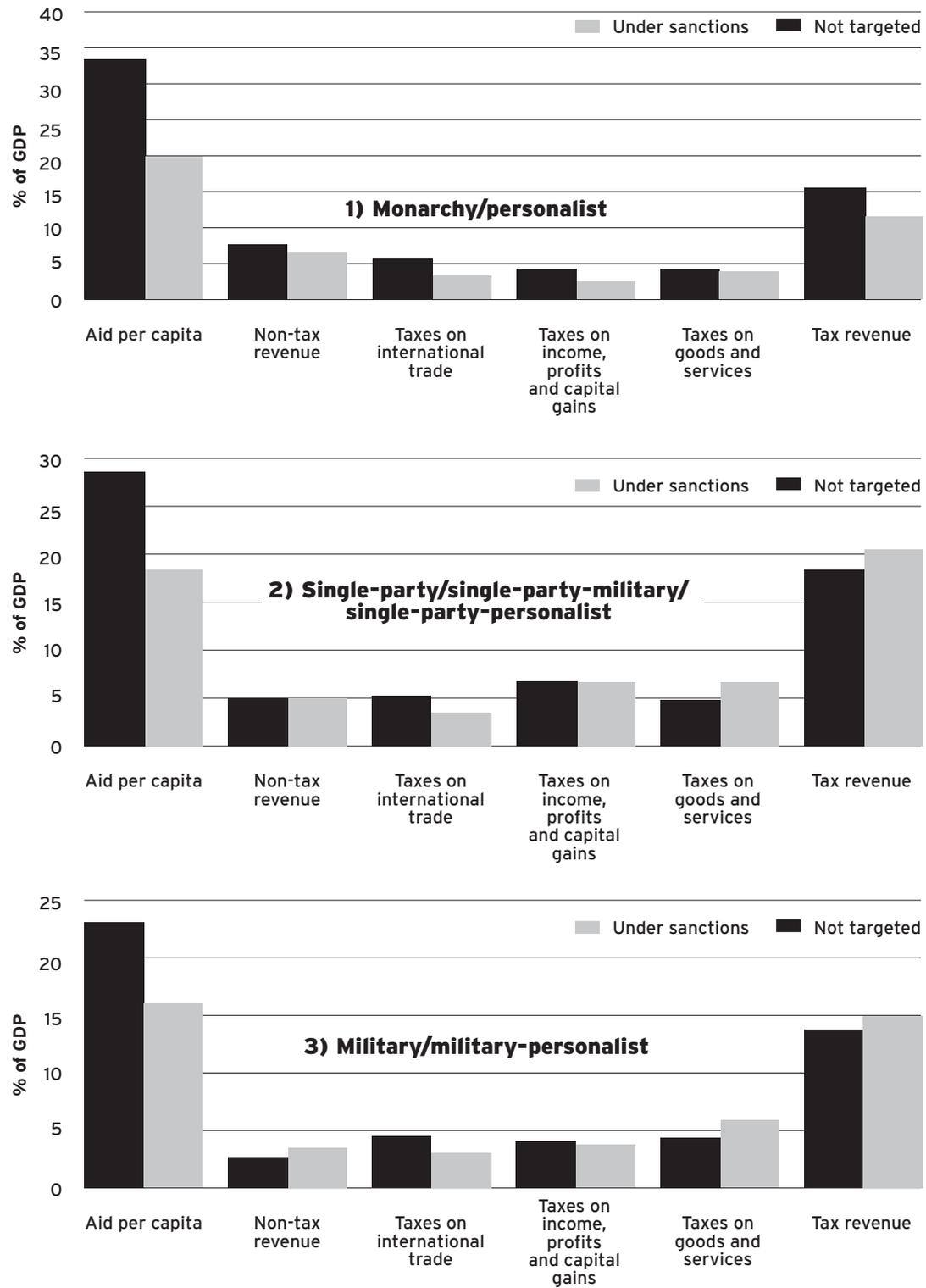
An imperfect measure of the level of cooptation and rent delivery confirms that personalist regimes are the most 'patronage-intensive' of all. Government consumption as a percentage of the GDP is higher under personalist systems and monarchies than under other regime types. So we can hypothesize that, if sanctions are well directed towards reducing rent availability, personalist (and monarchic) autocrats' stability in power can be severely damaged by international coercive measures. Falk argues that 'the maximum impact of human rights pressures, absent enforcement mechanisms, is to isolate a target government, perhaps denying it some of the benefits of trade and aid' (1992: 33). Conversely, if this kind of dictator is able to capture the rents that sanctions may generate, its duration in power can be prolonged by the presence of economic coercion.

Single-party and military regimes and rulers may not be so sensitive to a small reduction in their supportive coalitions and their external rents. Descriptive data on revenue composition actually show that, once under sanctions, single-party and military regimes are more able to shift fiscal pressure from one stream to another, a capacity that stems from their greater control over the territory and the population. Figures 1.1 to 1.3 reveal that the imposition of sanctions translates into sharp reductions of aid receipts and revenues from taxes on international trade and non-tax revenues for personalist regimes (including monarchies and personalist regimes with weak one-party systems), which, as can be observed in Figure 1.1, constitute their main sources of revenues[11]. Conversely, single-party as well as military regimes are even capable of increasing their tax revenues when they are targeted by sanctions, relying fundamentally on greater collections of taxes on goods and services;[12] these are less visible than taxes on income and profits, which may be more affected by the drop in economic growth that sanctions generally bring about.

As Figure 2 reveals, these budget restrictions have dissimilar effects on the patterns of expenditures depending on the type of regime in place and the spending category we focus on. As mentioned above, expenditures can be taken as rough measures of cooptation, especially expenditures on goods and services (which contain, among other sovereignty expenditures, wages and salaries) and subsidies and transfers (which include transfer payments to individuals, such as pensions and welfare programs, as well as subsidies to firms). Two interesting patterns merit comment. On the one hand, all regime types opt for reducing capital expenditures, that is, rulers under pressure shift resources from long-term development and investment programs to current spending and consumption. Yet there are important differences between regime types, as expected. The greatest decrease is observed in personalist regimes (from 7.81% to 4.68%), which, due to the general shrinkage in their resources, may seek to reallocate resources in order to minimize the cuts in other categories of spending, particularly subsidies and transfers[13]. Conversely, it is made evident that both

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11. Data on revenue composition are taken from the World Bank's *World Development Indicators*. Aid figures are expressed not as a percentage of GDP but in per capita terms.
12. Simple *t*-tests reveal that the differences between taxes on goods and services and tax revenue when targeted by sanctions and otherwise are statistically significant.
13. In fact, it seems that personalist regimes try to minimize the cuts in this specific category, as it is the only one for which the *t*-test is not significant when the averages both under economic sanctions and otherwise are compared.

single-party and military regimes' capacity to co-opt remains intact or even increases. The higher degree of inclusiveness of single-party regimes leads them to respond to economic statecraft by concentrating spending increases on subsidies and transfers, which can be assumed to predominantly benefit their supporting social sectors, such as the urban classes and the business elites. Expenditures on goods and services increase to a very similar extent under both single-party and military regimes[14]. The prioritization of cooptation over investment is also evident in these two regimes, in which 'capital expenditures' is the only category that is reduced.

As for levels of repression, the computed averages help to shed light on the distinct strategies that rulers adopt in the event of sanctions (see Figure 3). To gauge repression, we have used a measure, compiled from Hafner-Burton and Tsutsui (2007), which combines information from different existing political terror scales. The scale ranges from 0 to 5, where 5 is the maximum level of risks to personal integrity and terror. First, it can be observed that, on average, the major increases in repression in response to international pressures are found among personalist regimes[15], which, when targeted, almost reach the repression levels of military regimes. Given the dramatic decrease in the availability of patronage rents and, consequently, in their capacity to reward loyalty, personalist rulers are compelled to brusquely increase repression in a desperate attempt to retain power. Second, military regimes are the most 'repression-intensive' of all regime types. Their coercive capacity makes them better-equipped to deal with potential sudden rises in opposition due to international coercion and economic downturn. Moreover, if protest is exacerbated by economic sanctions, the military may renew its resolve to retain power with the aim of preserving public order (Ulfelder 2005). Single-party regimes increase the degree of their repressiveness as well, but less than the other two regime types[16]. Given the pronounced increases in redistributive spending, these regimes are less compelled to rely on repression. Their levels of repression are on average the lowest[17], regardless of whether they are targeted by sanctions.

To summarize, single-party and military regimes conform well to the strategic responses set out by Gershenson and Grossman (2001) and, in some way, to the second case dealt with by Kaempfer, Lowenberg and Mertens (2004), in which sanctions have little effect on the opposition's strength. Under both approaches, cooptation and repression should both be increased, as rulers in these regime types seem effectively to do. In sum, according to these last postulates, if revenues can still be collected from alternative sources, expenditures increased, and repression and control augmented, the imposition of sanctions may be ineffective in bringing tyranny to an end under single-party and military regimes. In contrast, in personalist regimes international sanctions cause a dramatic reduction in patronage rents and a bigger threat to the members of the small ruling coalition to be targeted by the resulting increase in repression levels. Furthermore, if any 'rally around the flag' effect has to take place, it

14. Increments in wages and salaries expenditures (as a percentage of the GDP) are greater under military regimes though: from 6.48% to 7.49%. Nonetheless, we should be careful in interpreting the data due to the small number of observations available.
15. From 2.56 to 3.64, i.e., a considerable increase of 1.07.
16. Concretely, 0.829; while the increase in military regimes is 0.885.
17. This point is already noted by Davenport's (2007) more elaborate findings on repression.

could possibly be argued that it is more likely in more inclusive regimes with mobilizing institutions, like single-party ones. Consequently, we expect economic sanctions to be effective in destabilizing authoritarian rulers only in personalist regimes.

Figure 2. Cooptation, sanctions and regime type: Government expenditures (% of the GDP)
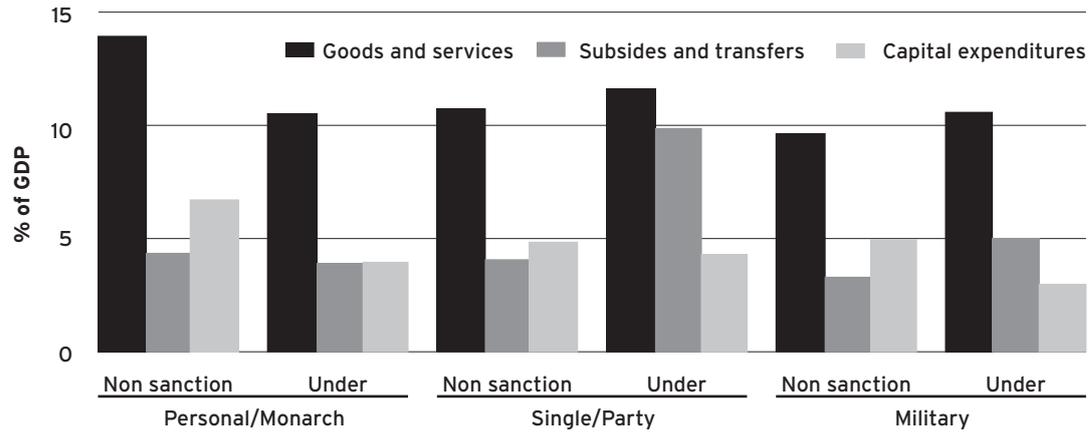
Figure 3. Averaged repression, sanctions and authoritarian regime type
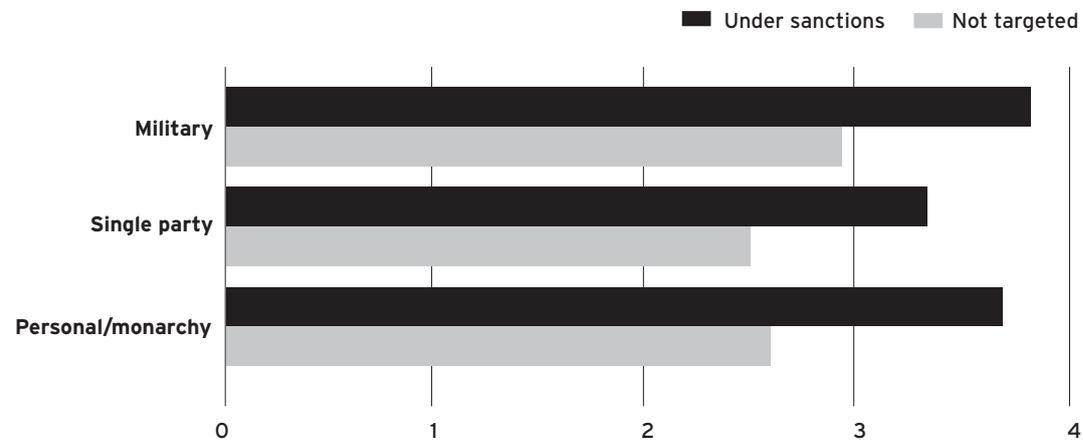
4. Data and Methods

Data on sanction episodes are taken from Marinov's (2005) replication data set, which recast the famous Hufbauer, Schott and Elliott's (1990) data set in country–year format and updated it. The variable *sanction* can take two values: 1 if a country has been targeted by economic sanctions in a given year, 0 if not. We lagged the sanctions variable one year since the effects of coercion may not be immediate.

The classification of authoritarian regime types is based on the typology developed by Barbara Geddes[18], which has been recently extended and updated by Joseph Wright[19]. We have recoded the data into three basic categories. First, we group the monarchic and personalist regimes into a category named 'personalist'. Evidence recently provided by Wright (2008) shows that monarchies as well as personalist regimes share a common pool of socioeconomic determinants. All in all, the personalist category comprises those regimes with personalistic features dependent on external sources of patronage rents. The second category is 'single-party' and includes pure single-party types, single-party/personalist hybrids and single-party/military hybrids. As for the personalist/single-party hybrids, they also show a high reliance on external sources of revenue as well as on cooptation expenditures[20], so in some model specifications we will include this regime type in the personalist category to check whether the results vary. The third category includes military and military/personalist regimes. We will alter the composition of these categories in our empirical analyses in order to establish the validity of our basic argument and the robustness of the results.

We control for a number of variables. On the economic conditions side, we include the log of the GDP per capita and its annual rate of growth. Both variables are taken from the Penn World Tables. In order to capture the accessibility to windfall resources to be potentially diverted to patronage networks, we include a *mineral-exporting country variable*, which is a time-invariant dummy variable coded 1 if the average ratio of ore and mineral exports in any year for which a country has data exceeded 50% of total merchandise exports, 0 otherwise[21]. The presence of other natural resources (specifically oil) has also been captured using the variables constructed by Humphreys (2005), which measures per capita oil reserves in a given year in billions of barrels.

Regarding institutions and recent regime history, we include a series of dummy variables that summarize the current institutions of the authoritarian regime as well as the previous regime existing in the country: The variable *previously democracy* takes value 1 if the preceding regime was democratic (0 otherwise), and is intended to gauge the potential strength of the pro-democratic civil opposition. Similarly, the variable *colony before* is coded 1 if prior to the current regime the country was under colonial administration, 0 otherwise. We include the index of religious fractionalization as well. Finally, we include the yearly proportion of authoritarian regimes existing within the same geographical region in order to control for potential international trends of democratization and potential inter-regime cooperation. The aim of including this variable is to test whether ruler change and liberalization can be the result of a diffusion process, especially at the regional level (Gleditsch and Ward, 2006). A dummy for the Cold War years has also been constructed. The variable takes value 1 for all the years between 1946 and 1990, 0 otherwise.

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18. See, for instance, Geddes (1999).
19. For more details, see Wright (2007).
20. They seem to correspond more to weakly institutionalized one-party regimes characterized by a shallow opposition and high rent access (Smith, 2005).
21. Source: World Bank; Przeworski et al. (2000).

We use a binary dependent variable which indicates whether a dictator loses power in a given year. Hence, the variable *autocrat removal* can take two distinct values: 1 if the incumbent ruler is replaced that year, and 0 if the dictator is in power in a given year. In the second part of the analysis we disaggregate this variable by establishing whether the ruler was replaced through regular or irregular means (Goemans et al. 2004).

The methodology employed consists basically of logistical regressions to analyze the likelihood of autocrats' fall, and multinomial logit to analyze the mode in which that fall took place (i.e., regular or irregular mode of exit). As usual when duration is analyzed using discrete-time data, the potential time dependence in the data is corrected by including natural cubic splines on the right-hand side of the equation to be estimated. Robust standard errors have been clustered.

5. Empirical Analysis

5.1 Autocrats' Duration and Foreign Pressure

The conditional nature of our hypotheses requires the use of interaction models. Therefore, we multiply the dummies created for each type of authoritarian regime by the economic sanctions dummy. Table 1 reports the estimated coefficients of the autocrats' duration models. The estimates reveal that the effectiveness of international sanctions is certainly dependent on the target country's authoritarian regime type.

In column 1 we report the model without any interaction. The coefficient of the sanction dummy is in this case minuscule, 0.084, and completely insignificant, albeit positive. This result would give credibility to the analysis of Lektzian and Souva's (2007), who argued that economic sanctions are less likely to be effective when targeting non-democratic regimes. Nevertheless, once the interactions are introduced, the resulting portrait reveals why sanctions looked ineffectual. A careful examination of the results in column 2 makes it evident that sanctions actually can have a destabilizing effect on those rulers most dependent on patronage rents, namely, personalist autocrats. The coefficient of the sanctions dummy, which corresponds to the reference category *personalist regime*, is positive and highly significant. Simple simulations show that the personalist leaders' average probability of being replaced when not targeted by economic sanctions is 0.048, while that of personalist rulers against whose regimes sanctions are imposed is 0.178[22]. The predicted increase in the likelihood of losing power, 0.13, is considerable.

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22. The rest of the variables are held constant at their means.

The raw coefficients of the interactive terms inform us about the distinct effect that sanctions have under the other two types of authoritarian regime (single-party and military) as compared with the effect of sanctions in personalist regimes. Yet these coefficients are not marginal effects. Actually, departing from a simple interactive logit model like this

$$E[Y] = \Lambda\,(\beta_0 + \beta_1\,Sanction + \beta_2\,Regime + \beta_3\,Regime*\,Sanction)$$

Given that both variables are dichotomous, the marginal effect of sanctions when *Regime* equals 1 is defined by the following expression

$$\frac{\delta\,\Lambda\,(\cdot)}{\delta Sanction}=(\beta_1+\beta_3)\Lambda'(\cdot)$$

According to this, in the model in column 2 we can observe that the effect of sanctions on rulers' stability in single-party regimes is negligible; whereas for military autocrats, it is actually negative.

Table 1. The effect of sanctions on autocrats' stability (logistic regression)

Independent variables	Dependent variable: Pr(y= Autocrats' exit)				
	1	2	3	4	5
Constant	- 2.25**	- 2.45**	- 2.35**	- 2.11*	- 4.10+
	(1.11)	(1.22)	(1.19)	(1.17)	(1.43)
Oil reserves (pc)	- 0.855+	- 0.799+	- 0.776+	- 0.986**	- 0.823+
	(0.282)	(0.248)	(0.253)	(0.413)	(0.287)
Mineral-exporting country	- 0.455	- 0.485*	- 0.480*	- 0.560*	- 0.449
	(0.306)	(0.285)	(0.282)	(0.302)	(0.458)
Economic growth	- 0.035+	- 0.035+	- 0.036+	- 0.031+	- 0.049+
	(0.011)	(0.011)	(0.011)	(0.011)	(0.013)
Log GDP per capita	0.051	0.048	0.043	0.062	0.118
	(0.108)	(0.110)	(0.104)	(0.113)	(0.127)
Log population	0.072	0.067	0.070	0.071	0.120*
	(0.057)	(0.064)	(0.065)	(0.058)	(0.080)
Religious diversity	- 0.334	- 0.440	- 0.354	- 0.608	0.055
	(0.378)	(0.394)	(0.382)	(0.397)	(0.445)
Colony before	- 0.665+	- 0.673+	- 0.613+	- 0.467**	- 0.663+
	(0.208)	(0.223)	(0.218)	(0.232)	(0.253)
Democracy before	- 0.330	- 0.318	- 0.316	- 0.363	- 0.592*
	(0.266)	(0.259)	(0.258)	(0.263)	(0.304)
Dictatorships within region (proportion)	- 1.04+	- 1.06+	- 1.15+	- 1.26+	- 1.19+
	(0.352)	(0.349)	(0.346)	(0.370)	(0.383)
Cold war	0.347	0.444*	0.444*	0.442	0.674**
	(0.262)	(0.267)	(0.256)	(0.270)	(0.329)
Years in power	0.027	0.029	0.027	- 0.063	0.028
	(0.021)	(0.027)	(0.026)	(0.061)	(0.023)
Single party	0.291	0.508**	0.449*	0.260	0.343
	(0.205)	(0.258)	(0.249)	(0.232)	(0.272)
Military	1.16+	1.50+	1.45+	1.35+	1.62+
	(0.249)	(0.302)	(0.296)	(0.265)	(0.322)
International sanctions	0.084	1.44+	1.28+	1.10+	1.40+
	(0.230)	(0.501)	(0.447)	(0.430)	(0.533)
Sanctions*Single-party		- 1.41**	- 1.24**	- 1.09**	- 1.50**
		(0.649)	(0.612)	(0.534)	(0.642)
Sanctions*Military		- 1.86+	- 1.71+	- 1.56+	- 1.21*
		(0.571)	(0.529)	(0.541)	(0.624)
Observations	2006	2006	2006	1858	1595
Wald-Chi2 (p>Chi2)	129.44 0.0000	204.33 0.0000	203.95 0.0000	127.15 0.0000	167.37 0.0000
Pseudo R-squared	0.089	0.0987	0.0976	0.0937	0.1187
Sample	Whole sample	Whole sample	Single-party/ personalist in personalist category	Excluding monarchies	No hybrids

Note: Standard errors in parenthesis. +p<.01 **p<.05 *p<.10. All models include duration splines.

According to the estimates in column 2, under a single-party system an autocrat's probability of losing power when targeted by sanctions is 0.081, and 0.078 when he is not under international pressure. The difference is minuscule. Regarding military dictators, their probability of being unseated is 0.187 if not targeted, and 0.131 if targeted by sanctions. Sanctions are slightly counterproductive in this case. Therefore, these two types of ruler are able to avoid the potentially destabilizing effect of economic sanctions. Military regimes (including hybrids) are more effective in this task, arguably thanks to their greater repressive capacity. Table 2 summarizes these estimated probabilities.

Table 2. The predicted impact of sanctions on the autocrat's likelihood of losing power

Pr(y=1, Sanctions=x Rest=mean)	Personalist/monarch	Single-party	Military
Not targeted	0.048	0.078	0.187
Targeted by sanctions	0.178	0.081	0.131
Not targeted	0.049	0.067	0.208
Targeted by sanctions	0.173	0.062	0.242

Note: Probabilities obtained from results in column 2 (first two rows) and 5, respectively.
The rest of the variables are held constant at their sample means.

In column 3 of Table 1 the hybrid regime type 'single-party/personalist', initially included in the more general 'single-party' category, is now included in the 'personalist' category in order to check whether the results in column 2 were driven by the classification of this particular type of hybrid regime. The results show that this is not the case; and, although all the coefficients are somewhat smaller, the patterns identified remain unaltered. The coefficients are also similar if we exclude the monarchies from our sample, as in the model reported in column 4. Again, the effect of sanctions is strong and positive on personalist autocrats' likelihood of losing power. Finally, in the model in column 5 we have ruled out all the hybrid regimes from the sample. In this case the effect of sanctions under single-party and military regimes differs from our baseline model. As reported in Table 2, this effect is now slightly positive for rulers of military regimes and tenuously negative for leaders of single-party authoritarian regimes. Perhaps pure types better capture the mobilization capacity of one-party systems that translates into a 'rally around the flag' effect within this regime type. This point is reinforced when we use fixed-effect logit models, as reported in Table 3. In this case, the model including only the pure types (column 2) reveals a bigger positive effect of sanction imposition on rulers' duration in office. The impact on military regimes remains slightly positive, while in the model that includes the hybrids (column 1) sanctions strongly destabilize personalist rulers but have no effect on the other two regime types (the resulting coefficient is actually negative but very small).

Table 3. The effect of sanctions on autocrats' stability (fixed-effects logistic regression)

Independent variables	Dependent variable:Pr(y= Autocrats' exit)	
	1	2
Oil reserves (pc)	- 2.86***	- 2.77***
	(0.906)	(1.05)
Economic growth	- 0.040***	- 0.050***
	(0.013)	(0.014)
Log GDP per capita	1.18***	1.03**
	(0.410)	(0.479)
Log population	- 0.276	0.477
	(0.534)	(0.641)
Dictatorships within region (proportion)	- 1.94**	- 0.819
	(0.830)	(1.03)
Years in power	0.012	0.025
	(0.030)	(0.030)
Single party	0.643	0.853
	(0.398)	(0.581)
Military	1.39***	1.54***
	(0.360)	(0.484)
International sanctions	1.62***	1.77***
	(0.550)	(0.567)
Sanctions*Single-party	- 1.793**	- 2.43***
	(0.726)	(0.808)
Sanctions*Military	- 1.796***	- 1.60**
	(0.653)	(0.717)
Observations	1863	1436
LR-Chi2(p>Chi2)	79.56 0.0000	72.86 0.0000
Sample	Whole sample	Pure types

Note: Standard errors in parenthesis. ***$p<.01$ **$p<.05$ *$p<.10$.
 All models include duration splines.

The rest of the variables perform basically in line with our expectations and the existing literature. Exportable natural resources (oil and minerals) reduce the risk of being unseated by providing the autocrat with abundant patronage rents with which support can be bought, as already observed by some other analysts[23]. Good economic performance is also a risk-reducing variable. The international context, captured by the regional proportion of authoritarian regimes, also acts as a stabilizing factor. On current and past institutions, we have found the following patterns: in accordance with Frantz (2007), it is shown that elites in military regimes have the greatest capacity to overthrow the incumbent ruler (the effect is strong and highly significant), followed by single-party regimes. The nature of the previous regime matters as well if the country was a former colony; the inherited political institutions and demobilized opposition help the dictator to extend his hold on power. Finally, the results reveal that, on average, the stability of dictators has increased since the end of the Cold War.

23. See, for example, Brough and Kimenyi (1986), Gandhi and Przeworski (2006), Ulfelder (2007) and Smith (2004).

5.2 Autocrats' Modes of Exit

If sanctions effectively alter the calculus of those within the regime power elite by reducing the amount of patronage rents in the hands of the ruler, or if the social unrest caused by the scarcity they bring about triggers military intervention, the mechanism through which sanctions may principally affect personalist autocrats' duration is the augmented likelihood of a coup or a palace putsch due to the low degree of institutionalization and regulation of access to power existing in such regimes. To test this proposition we use the variable *Exit mode*, which has been taken from the *Archigos* database (Goemans et al., 2004). Specifically, this variable indicates whether the leader lost office as a result of an irregular transfer (like a coup, a putsch, a revolt or an assassination), as a result of a regular transfer (such as a resignation, pact transitions, regulated successions and so on), and whether the leader was deposed by a foreign state or died while still in office[24]. The independent variables included in the model coincide with those employed to estimate the models in Table 1. The estimation method is now multinomial logistic regression. Again, duration splines have been included and errors clustered.

Table 4 reports the results using the variable *regime type* coded as detailed in section 4 and used in Table 1 (columns 1 and 2). First, it is worth noting that the overall relationship between sanctions, regime type and duration holds. The destabilizing effect of sanction is again concentrated on personalist rulers and, concretely, on making the risk of an irregular mode of exit much more likely. The probability of an irregular ruler change when the government is not targeted by sanctions is just 0.029. This likelihood increases to 0.1124 when sanctions are imposed[25]. In contrast, the counterproductive impact of sanctions on military regimes can be observed in both modes of losing power. Increased repression and cooptation and a stronger will to retain power allow military rulers to reduce the risks of irregular changes and elite splits that might be conducive to a transfer of power to civilians.

It is also interesting to observe the contradictory effect that some independent variables exert once the dependent variable has been disaggregated. That is the case with variables such as the logarithm of the population, the logarithm of the GDP per capita, *single-party regime* and *democracy before*. Thus, for instance, development is shown to have a positive effect on the likelihood of regular changes but it decreases the probability of putsches, coups, revolutions and assassinations[26].

One of the functions of single-party systems is to regulate leadership succession and access to power in order to facilitate cooperation among those already in power. This is the reason why, as reported, regular changes may be more frequent under such regimes than irregular ousters. Conversely, the vulnerability of military rulers is made evident; on average, military autocrats face much higher risks of being replaced

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24. See Goemans et al. (2004) for more details on the codification of this variable.
25. Again, the rest of the variables are held constant at their means.
26. This latest finding is fully consistent with the existing literature. For example, Londregan and Poole (1990) find a prominent inverse relationship between coup occurrence and per capita income. See also Galetovic and Sanhueza (2000).

through either means. This possibility occurs especially through a regular transfer of power, which coincides with Geddes' (1999) view of the military handing power to civilians as soon as their institutional cohesion is endangered by the exercise of power.

Table 4. Dictators' mode of exit and economic sanctions: Multinominal logit

	Dependent variable: Pr(y= Autocrats' mode of exit)	
Independent variables	**Regular**	**Irregular**
Constant	− 8.09+	3.62**
	(2.12)	(1.56)
Oil reserves (pc)	− 2.11+	0.139
	(0.797)	(0.232)
Mineral-exporting country	− 0.880*	− 0.114
	(0.489)	(0.379)
Economic growth	− 0.044**	− 0.036**
	(0.018)	(0.16)
Log GDP per capita	0.502+	− 0.547+
	(0.194)	(0.167)
Log population	0.289+	− 0.214**
	(0.103)	(0.087)
Religious diversity	0.793	− 0.517
	(0.701)	(0.495)
Colony before	− 1.18+	− 0.503*
	(0.348)	(0.302)
Democracy before	− 0.799**	0.410
	(0.399)	(0.361)
Dictatorships in region (proportion)	− 2.18+	− 0.993**
	(0.691)	(0.490)
Cold war	0.156	0.832**
	(0.402)	(0.405)
Years in power	− 0.322	0.042+
	(0.236)	(0.014)
Single party	1.21+	− 0.115
	(0.426)	(0.323)
Military	2.23+	1.11+
	(0.481)	(0.381)
International sanctions	1.02	1.45+
	(0.857)	(0.449)
Sanctions*Single-party	− 0.969	− 1.15
	(0.921)	(0.805)
Sanctions*Military	− 1.69*	− 1.74+
	(0.982)	(0.638)
Observations	1986	
Wald-Chi2 (p>Chi2)	222.65 0.0000	
Pseudo R-squared	0.1362	

Note: Standard errors in parenthesis. +p<.01 **p<.05 *p<.10.
All models include duration splines.

6. Concluding Remarks

Economic sanctions are possibly the most widely used measure of international pressure. Nevertheless, analysts still discuss their effectiveness in achieving certain foreign policy goals. Many such measures have been imposed against authoritarian regimes, but we still know little about the targets' institutional features that might condition their efficacy. This paper is a first attempt to fill this particular gap in our understanding of the impact of international economic coercion.

Our theoretical argument emphasizes the negative impact that sanctions have on dictators' ability to obtain patronage rents. As effectively shown, countries under economic sanctions see the amount of foreign aid, non-tax revenues and taxes on international trade significantly reduced. This impact is especially dramatic in patronage-intensive regimes such as personalist dictatorships, which in turn are unable – due to their limited state capacity and predatory behaviour – to compensate this loss by augmenting revenue collections from alternative streams. Moreover, the substantial increases in the levels of repression that sanctions cause may actually increase the perception of threat on the part of the members of the small supporting coalition of a personalist ruler, while at the same time the benefits of such support are likely to shrink.

In contrast, single-party and military regimes are able to increase their revenues even when targeted by sanctions, by shifting fiscal pressure from one stream to an alternative one (specifically, taxes on goods and services). This allows them to maintain cooptation while they increase repression in order to thwart the potential opposition that reduced economic performance and international support may generate.

Departing from these facts, we hypothesized then that sanctions would be effective in destabilizing only personalistic autocrats, while their impact would be negligible or even counterproductive on single-party and military dictatorships.

The results of our interactive logistic models have largely confirmed this general hypothesis. Sanctions are shown to increase autocrats' likelihood of losing power in personalist regimes, when a number of variables are controlled for. Simple simulations using our baseline model show that the personalist leader's average probability of being replaced if not targeted by economic sanctions is 0.048, while that of rulers against whose regimes sanctions are imposed is 0.178. However, as expected, the effect of sanctions is not significant in single-party regimes and counterproductive (reducing the likelihood of leaders' exit) in military regimes.

Yet some of the findings are sensitive to the specification of the sample, that is, to whether we include hybrid regimes. When the hybrids are excluded from the sample, the positive impact of sanctions on rulers' duration is observed in single-party regimes, while the impact is insignificant in military regimes. The negative effect on personalist rulers remains unaltered.

Finally, we have examined the mechanisms through which those ruler changes are carried out. To do so we have disaggregated our dependent variable, *leaders' exit*, into a categorical one that distinguishes between regular and irregular means of replacing the dictator. The results of the multinomial logistic regressions reveal that the defection of the elites in personalist regimes translates into a higher risk of an irregular replacement, namely, a coup, an assassination or a palace putsch.

References

Arendt, Hannah. 1962 [First published in 1951]. *The Origins of Totalitarianism*. New York: Meridian.

Askari, Hossein G., John Forrer, Hildy Teegen, and Jiawen Yang. 2003. *Economic Sanctions: Explaining their Philosophy and Efficacy*. Westport, CT: Praeger.

Bertocchi, Graziella and Michael Spagat. 2001. The Politics of Co-optation. *Journal of Comparative Economics*, 29 (4): 591-607.

Brautigam, Deborah. 2000. *Aid, Dependence, and Governance*. Stockholm: Almqvist and Wiksell.

Brough, Wayne T. and Mwangi S. Kimenyi. 1986. On the Inefficient Extraction of Rents by Dictators. *Public Choice*, 48 (1): 37-48.

Brownlee, Jason. 2004. Ruling Parties and Durable Authoritarianism. Paper presented at the Annual Meeting of the APSA. Chicago, Illinois, 2-5 September.

Brownlee, Jason. 2007. *Authoritarianism in an Age of Democratization*. New York: Cambridge University Press.

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

Dashti-Gibson, Jaleh, Patricia Davis and Benjamin Radcliff. 1997. On the Determinants of the Success of Economic Sanctions: An Empirical Analysis. *American Journal of Political Science*, 41 (2): 608-618.

Davenport, Christian. 2007. State Repression and the Tyrannical Peace. *Journal of Peace Research*, 44 (4): 485-504.

Dudley, Ryan and Ross A. Miller. 1998. Group Rebellion in the 1980s. *The Journal of Conflict Resolution*, 42 (1): 77-96.

Escribà-Folch, Abel. 2007. La Economía Política de la Supervivencia de los Dictadores. *Revista Española de Ciencia Política*, 16: 109-132.

Falk, Richard A. 1992. Theoretical Foundations of Human Rights. In Richard Pierre Claude and Burns H. Weston (eds). *Human Rights in the World Community: Issues and Action*, pp. 31-42. Philadelphia: University of Pennsylvania Press.

Feierabend, Rosalind, Ivo Feierabend and Ted R. Gurr. 1972. *Anger, Violence and Politics*. Englewood Cliffs, NJ: Prentice-Hall.

Frantz, Erica. 2007. Tying the Dictator's Hands: Leadership Survival in Authoritarian Regimes. Available at SSRN: http://ssrn.com/abstract=975161

Friedrich, Carl J. and Zbigniew K. Brzezinski. 1961 [First published in 1956]. *Totalitarian Dictatorship and Autocracy*. New York: Praeger.

Galetovic, Alexander and Ricardo Sanhueza. 2000. Citizens, Autocrats, and Plot-

ters: A Model and New Evidence on Coups d'État. *Economics & Politics*, 12 (2): 183-204.

Gallego, Maria E. and Carolyn Pitchik. 1999. An Economic Theory of Leadership Turnover. Working Paper 99-01. University of Toronto.

Gandhi, Jennifer and Adam Przeworski. 2006. Cooptation, Cooperation, and Rebellion under Dictatorships. *Economics & Politics*, 18 (1): 1-26.

Gandhi, Jennifer and Adam Przeworski. 2007. Authoritarian Institutions and the Survival of Autocrats. *Comparative Political Studies*, 40 (11): 1279-1301.

Geddes, Barbara. 1999. What Do We Know about Democratization after Twenty Years? *Annual Review of Political Science*, 2: 115-144.

Geddes, Barbara. 2004. Authoritarian Breakdown. Manuscript, University of California, Los Angeles.

Gershenson, Dmitriy and Herschel I. Grossman. 2001. Cooption and Repression in the Soviet Union. *Economics and Politics*, 13 (1): 31-47.

Gibson, Clark C. and Barak Hoffman. 2002. Dictators with Empty Pockets: A Political Concessions Model of Africa's Democratization. Paper presented at the 2002 Annual Meetings of the American Political Science Association, Boston, MA.

Gleditsch, Kristian S. and Michael D. Ward. 2006. Diffusion and the International Context of Democratization. *International Organization*, 60 (4): 911-933.

Goemans, Hein, Kristian S. Gleditsch, Giacomo Chiozza and Jinhee L. Choung. 2004. Archigos: A Database on Political Leaders. Typescript, University of Rochester and University of California San Diego.

Grossman, Herschell I. 1991. A General Equilibrium Model of Insurrections. *The American Economic Review*, 81 (4): 912-921.

Haass, Richard N. 1997. Sanctioning Madness. *Foreign Affairs*, 76 (6): 74-85.

Haber, Stephen. 2006. Authoritarian Government. In Barry R. Weingast and Donald Wittman. *The Oxford Handbook of Political Economy*, pp. 693-707. New York: Oxford University Press.

Hafner-Burton, Emilie M. and Kiyoteru Tsutui. 2007. Justice Lost! The Failure of International Human Rights Law to Matter Where Needed Most. *Journal of Peace Research*, 44 (4): 407-425.

Hufbauer, Gary C., Jeffrey J. Schott and Kimberley A. Elliott. 1990. *Economic sanctions reconsidered: history and current policy*. Washington, DC: Institute for International Economics.

Humphreys, Macartan. 2005. Natural resources, conflict and conflict resolution. *Journal of Conflict Resolution*, 49 (4): 508-537.

Jackson, Robert H. and Carl G. Rosberg. 1984. Personal Rule: Theory and Practice in Africa. *Comparative Politics*, 16 (4): 421-442.

Johnson, Thomas H., Robert O. Slater and Pat McGowan. 1984. Explaining African Military Coups d'État, 1960-1982. *The American Political Science Review*, 78 (3): 622-640.

Kaempfer, William H. and Anton D. Lowenberg. 1988. The Theory of International Economic Sanctions: A Public Choice Approach. *The American Economic Review*, 78 (4): 786-793.

Kaempfer, William H., Anton D. Lowenberg and William Mertens. 2004. International Economic Sanctions against a Dictator. *Economics & Politics*, 16 (1): 29-51.

Kasza, Gregory J. 1995a. Weapons of the Strong: Organization and Terror. In Cheha-

bi, H. E. and Alfred Stepan (eds). *Politics, Society, and Democracy. Comparative Studies*. Boulder, Colorado: Westview.

Kasza, Gregory J. 1995b. *The Conscription Society: Administered Mass Organizations*. New Haven: Yale University Press.

Lektzian, David and Mark Souva. 2007. An Institutional Theory of Sanctions Onset and Success. *Journal of Conflict Resolution*, 51 (6): 848-871.

Lieberman, Evan S. 2002. Taxation Data as Indicators of State-Society Relations: Possibilities and Pitfalls in Cross-National Research. *Studies in Comparative International Development*, 36 (4): 89-115.

Londregan, John B. and Keith T. Poole. 1990. Poverty, the Coup Trap, and the Seizure of Executive Power. *World Politics*, 42 (2): 151-183.

Margalit, Yotam. 2005. Bowing Out: Conditions for Authoritarian Step-Down. Paper presented at the annual meeting of the American Political Science Association, Washington, DC.

Marinov, Nikolay. 2005. Do Sanctions Destabilize Country leaders? *American Journal of Political Science*, 49 (3): 564-576.

Morrison, Kevin M. 2007. Non-tax Revenue and the Redistributional Foundations of Regime Stability. Manuscript, Duke University.

Mueller, John and Karl Mueller. 1999. Sanctions of Mass Destruction. *Foreign Affairs*, 78 (3): 43-53.

Nurnberger, Ralph. 2003. Why Sanctions (Almost) Never Work. *The International Economy*, 17 (4): 71-72.

O'Kane, Rosemary H. T. 1981. A Probabilistic Approach to the Causes of Coups d'État. *British Journal of Political Science*, 11 (3): 287-308.

O'Kane, Rosemary H. T. 1993. Coups d'État in Africa: A Political Economy Approach. *Journal of Peace Research*, 30 (3): 251-270.

Pinto-Duschinsky, Michael. 1991. Foreign Political Aid: The German Political Foundations and Their US Counterparts. *International Affairs*, 67 (1): 33-63.

Przeworski, Adam, Michael Álvarez, Fernando Limongi and José A. Cheibub. 2000. *Democracy and Development: Political Institutions and Material Well-Being in the World, 1950-1990*. New York: Cambridge University Press.

Schapiro, Leonard. 1972. *Totalitarianism*. London: Pall Mall.

Smith, Benjamin. 2004. Oil Wealth and Regime Survival in the Developing World, 1960-1999. *American Journal of Political Science*, 48 (2): 232-246.

Smith, Benjamin. 2005. Life of the Party. The Origins of Regime Breakdown and Persistence under Single-Party Rule. *World Politics*, 57 (3): 421-451.

Tullock, Gordon. 1987. *Autocracy*. Boston, MA: Kluwer Academic Publishers.

Ulfelder, Jay. 2005. Contentious Collective Action and the Breakdown of Authoritarian Regimes. *International Political Science Review*, 26 (3): 311-334.

Ulfelder, Jay. 2007. Natural-resource wealth and the survival of autocracy. *Comparative Political Studies*, 40 (8): 995-1018.

Van Bergeijk, Peter A. G. 1989. Success and Failure in Economic Sanctions. *Kyklos*, 42 (3): 385-404.

Van de Walle, Nicolas. 2001. *African Economies and the Politics of Permanent Crisis, 1979-1999*. Cambridge, UK: Cambridge University Press.

Wintrobe, Ronald. 1990. The Tinpot and the Totalitarian: An Economic Theory of Dictatorship. *The American Political Science Review*, 84 (3): 849-872.

Wintrobe, Ronald. 1998. *The Political Economy of Dictatorship*. New York: Cambridge University Press.

Wright, Joseph. 2007. Foreign Aid and Political Regimes. PhD dissertation, UCLA, Department of Political Science.

Wright, Joseph. 2008. Do Authoritarian Institutions Constrain? How Legislatures Impact Economic Growth and Investment. *American Journal of Political Science*, 52 (2): 322-343.