

OVERPROTECTED POLITICIANS

BRUNO S. FREY

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Abstract

This paper argues that politicians are overprotected. The costs of political assassination differ systematically depending on whether a private or a public point of view is taken. A politician attributes a very high (if not infinite) cost to his or her survival. The social cost of political assassination is much smaller as politicians are replaceable. Conversely, the private cost of the security measures is low for politicians, its bulk – including time loss and inconvenience – is imposed on taxpayers and the general public. The extent of overprotection is larger in dictatorial than in democratic countries.

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Bruno Frey
University of Zurich
Institute for Empirical Research in Economics
Winterthurerstr. 30
8006 Zurich
Switzerland
bsfrey@iew.unizh.ch

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How often were you annoyed when some politician visited your city and several roads or even whole sectors of the city were cleared and sealed off for security reasons? Such operations are a major nuisance especially for residents of capital cities but they also occur outside the capital when foreign dignitaries visit a country and meet with their hosts somewhere in the countryside. The same holds for international conferences attended by politicians, such as the “Big 8”. In Soviet type countries it was taken as a matter of course that special lanes of the roads were permanently reserved for the members of the *nomenklatura*. It seems that this still holds for the *classe politique* in several post-Soviet countries and elsewhere.

People may well ask themselves whether such extensive security measures are appropriate. In democracies, the citizens may wonder whether such privileges are consistent with the idea of being part of a political system that is “ruled by the people”. The fact that one observes little resistance to the restrictions and hassle imposed on the population at large is easy to explain. The costs imposed have the character of a public good in the sense that many persons are burdened, but taking action against the security measures benefits the whole (non-ruling) population. Moreover, opposing security measures may even be dangerous as it may be interpreted as an indirect support for political assassination, thus possibly having negative consequences for opponents.

I argue in this paper that politicians are indeed overprotected. This is due to a simple but – to my knowledge – so far largely neglected reason. The cost of political assassination differs systematically depending on whether a private or public point of view is taken. Of course a politician risking death attributes a very high (if not infinite) cost to that possibility. The social cost of political assassination is much lower as politicians are replaceable. If one is killed, there are normally many others who can substitute for him or her. Conversely, the private cost of the security measures is low for politicians as it is shifted to taxpayers and the general public. The cost of security measures in terms of resources used and time and inconvenience cost imposed on the population is high for society. Consequently, politicians are overprotected in all regimes, although the degree of overprotection is larger in dictatorial than in democratic countries.

Section I discusses the possibility frontier (or trade off) linking the probability of political assassination¹ and the security measures. This probability frontier lies in a fundamentally different position in a democracy than in a dictatorship. The point of tangency with the social indifference curve determines the *socially* optimal

¹ For histories of political assassinations events see e.g. Ray 2001, De Witte 2001, Lancella 1999, Posner 1993, Fetzer 2000. Encyclopedic treatments are Sifakis 2001 and Lentz 1988. Explanations for political assassinations are overwhelmingly psychological, assassins being characterized as mentally disturbed individuals, see e.g. Clarke 1981, 1982, Freedman 1965. There are only few analyses from the point of view of social science. Earlier contributions are Feierabend and Feierabend 1966, Feierabend, Nesvold and Feierabend 1970, Feierabend, Feierabend and Nesvold 1973, Snitch 1982. Important recent contributions are Iqbal and Zorn 2005, 2006, Jones and Olken 2006.

Excellent analyses of dictatorships from the point of view of rational choice have been provided by, among others, Tullock (1987), Tullock and Rowley (2005) and Wintrobe (1990, 1998).

combination. The subsequent section analyzes the private indifference curve of politicians between being assassinated and undertaking security measures. This determines the *private* optimum. Section III considers what the *actual* choice is likely to be, depending on the type of regime. Section IV discusses the insights gained and shows the robustness of the two major results: (1) All politicians are overprotected (compared to the social optimum), and (2) dictatorial politicians are relatively even more overprotected. The last section concludes.

I. The Possibility Frontier and the Social Optimum

The larger security efforts are, the lower is the probability that a politician is attacked and killed. The resulting possibility frontier (or trade-off) is shown in Figure 1. The probability of being killed – $\text{prob}(k)$ – is conditional on (1) that somebody has the desire to kill the ruling politician; (2) that the desire is transformed into an intention; (3) that a concrete assassination attempt is undertaken; and (4) that the attempt is successful in the sense that the politician is indeed killed.

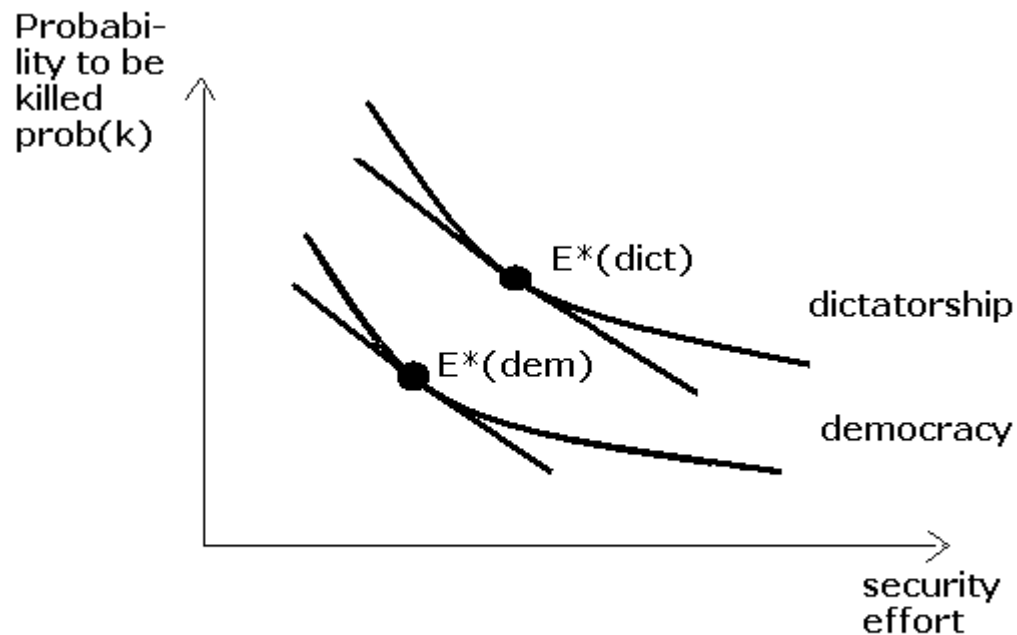


Figure 1. The trade off between assassination and security effort and the social optimum

The Figure suggests that the probability of a ruler being killed is the lower, the more effort is used to protect him or her. These efforts may consist in having security personnel (bodyguards), employing bulletproof vests, armored cars, bomb and weapon detectors, as well as shutting down sections of cities and roads, and having restricted access to buildings. Nevertheless, even if a huge amount of effort is expended, it is impossible to guarantee a politician's complete safety. The possibility frontier in Figure 1 therefore levels off, and does not reach the x-axis with $\text{prob}(k) = 0$.

A recent study by Jones and Olken (2006) collected data on the probability of political assassination. Based on event reports ranging from 1875 to 2004 (Archigo data, see Goemans, Gleditsch and Chiozza 2005) the authors analyze 301 political assassination attempts, 61 of which were “successful”. The study is restricted to “political leaders” defined as “the most powerful political figure[s] in a country at a certain point in time”. Coups d’état and undiscovered assassination attempts were excluded, and only “serious attempts” were considered (see Jones and Olken 2006, p. 6-7). The conditional probability of a political leader being killed given a serious attempt is about 25%. This probability has remained almost constant over time. If the number of *successful* attacks is considered, today a given political leader has a 0.4% probability of being killed by an assassin (Jones and Olken 2006, p. 9).

Figure 1 differentiates between two possibility frontiers. A democracy is characterized by an orderly change of power, even if the political leader is killed. Political decisions depend little on the personality of politicians because they are constrained by the citizens. In contrast, dictators have a large discretionary power and if they are killed, the political course is likely to change. Moreover, a dictator is more oppressive, inducing a “demand” for killing him or her (this difference between democracy and dictatorship is more fully examined in Frey 2007). As a result, the possibility frontier of a democracy is closer to the origin than is the one for a dictatorship. For a given level of security measures, the probability of being killed is higher for a dictatorial than for a democratic leader. A given probability of surviving (or not being killed) can be achieved with fewer resources in a democracy than in a dictatorship. The possibility frontier for an authoritarian ruler lies between a democracy and a dictatorship.

A more extreme case than shown in Figure 1 is implicitly contained in the theory of pure competitive democracy according to Schumpeter (1950) and Downs (1957). As the two parties in competition are forced to pursue the same policy (in the median of the voter distribution), and the politicians have no discretionary room, killing a political leader would have no consequence for a pure competitive democracy. The possibility frontier for such a perfect democracy is in the origin, and there are neither any political assassinations nor any security measures. The possibility frontier pictured in Figure 1 is drawn for a less than perfect democracy, one in which the political leaders have some discretionary room and where it therefore matters to some extent who is in power.

The difference in the positions of the democratic and dictatorial possibility frontier is supported by empirical evidence. In a study on the consequences of political assassinations covering 80 assassinations of heads of states while in office between the end of World War II and 2000, Iqbal and Zorn (2005, 2006) find that assassinations are less likely to occur in democratic systems that have a regular and institutionalized mechanism of leadership turnover. Jones and Olken (2006: 22) conclude that autocrats are about 30 percent more likely to be attacked in a given year than democratic rulers.

Figure 1 also indicates the best possible position from a *social* point of view on the possibility frontier. The *social* indifference curve between the probability of a successful political assassination and the effort to protect politicians reaches the possibility frontier from below. For simplicity, the utility trade-off is taken to be a straight line; i.e. a given reduction in the probability of a ruler being killed is assumed to be worth the same additional protection effort over the whole range. It is also taken

to have the same slope for democracy and dictatorship; i.e. the type of regime does not affect the social evaluation. (The first assumption of straight indifference lines is innocuous. The second assumption of parallel indifference lines will be relaxed in Section III. It will be shown that assuming sensible and empirically relevant differences between political regimes strengthens the results derived).

The best possible points on the possibility frontiers, or the *social optimum* in Figure 1 is at $E^*(\text{dem})$ and at $E^*(\text{dict})$. In this equilibrium, dictators are associated with a higher probability of being killed and are undertaking a higher level of security measures than democratic leaders.

II. *The Private Optimum*

The *private* considerations of the *political leaders* with respect to being killed and spending effort to protect themselves differ fundamentally from the social considerations. As other persons too, politicians want to stay alive and therefore put a very high cost on being the target of attack and being killed. In contrast, for them the cost of protection is low as it is paid by the general public budget. The non-monetary cost in terms of inconvenience and time loss is externalized and imposed on the general population. While the cost of protection may be high in absolute terms, they are minor compared to other public expenditures. The loss of not being able to use the resources for other purposes remains therefore low. Some costs result from the restrictions imposed on the politicians themselves by security considerations (e.g. they cannot move around without bodyguards, which may be undesirable). Additional cost may arise from the security apparatus itself, which may develop a life of its own and may threaten to take over power. This was very common in ancient Rome where the Praetorians acted in this way but is of lesser relevance today, at least in democratic countries (but notice that Prime Minister Indira Gandhi was killed by two of her own security guards in 1984).

For simplicity the two private indifference lines are again taken to be a straight line and parallel. It is thus assumed that democratic politicians put as much value on reducing the probability of being killed as dictators do (“a life is a life”), and both are equally unconcerned about the corresponding additional security costs carried by others. These assumptions may be doubted if one believes in democratic politicians being “better” than those in more autocratic regimes. In contrast, Public Choice theory (see Mueller 1997, 2002, Besley 2006) builds on the presumption that democratic politicians do not differ in nature from autocratic rulers and therefore have the same utility trade-offs (but they are more severely constrained in their actions, see below). The private indifference lines are (much) *flatter* than the social ones as politicians put (much) more weight on their own survival than does society as a whole, and because they tend to disregard the cost of protection which society as a whole takes into account. Figure 2 shows the resulting private equilibria $\hat{E}(\text{dem})$ and $\hat{E}(\text{dict})$ associated with a lower probability of being killed and higher security measures compared to the respective social equilibria $E^*(\text{dem})$ and $E^*(\text{dict})$.

III. *Actual Position*

The actual position evolving deviates from both the social and the private optimum. As has been worked out by Public Choice Theory, there is no incentive for political decision makers to choose the position on a trade-off best for society. Rather, politicians would like to reach what is best for themselves. However, they are

restricted in their possibilities. In a democracy, the major constraint is imposed by the need to be re-elected in order to stay in power. In a well-functioning polity, this constraint ensures that the politicians are forced to stay close to the social optimum. Figure 2 indicates this point $E(\text{dem})$ on the democratic trade-off. This means that the probability of being killed is higher, and that fewer resources are spent, and imposed on the population, than the individual politicians would privately desire. In contrast, a dictator has less binding restrictions from the population he rules. But a dictator is not completely free to choose his privately optimal position. He must always take into account that unpopular policies may lead to an uprising either by the population or, more likely, by a contending group such as the military. But a dictator can certainly choose a position closer to the private optimum than a democratic ruler can. This is indicated by $E(\text{dict})$ in Figure

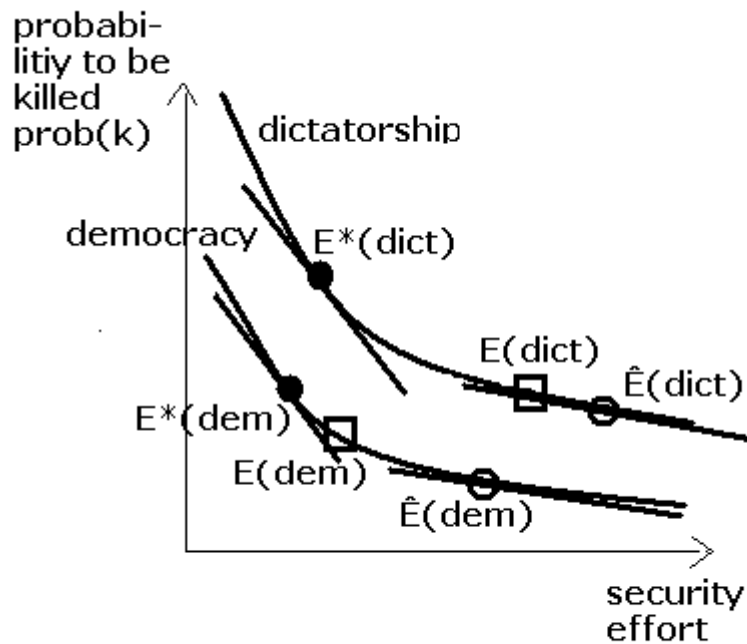


Figure 2. Actual position [$E(\text{dem})$ and $E(\text{dict})$], compared to the socially [$E^*(\text{dem})$ and $E^*(\text{dict})$] and privately [$\hat{E}(\text{dem})$ and $\hat{E}(\text{dict})$] optimal positions on the democratic and dictatorial possibility frontiers.

Our analysis leads to the following conclusions:

- (1) *All politicians are overprotected compared to what is socially optimal.*
- (2) *In a dictatorship more effort is used to protect the ruler than in a democracy.*
A dictator uses more material resources and imposes higher costs on the population for that purpose than a democratic leader. In marginal terms it may be predicted that the more authoritarian a political system is, the higher are the efforts and expenditures to protect politicians.

IV. Discussion

In order to test the *robustness* of these results, the assumption of parallel *social* indifference curves is now relaxed. It may be argued that the assassination of a dictator is a desirable event from a social point of view. If this is indeed the case, the social indifference line becomes steeper as society will be less willing to undertake more security efforts for a given reduction in the probability of assassination. As a consequence, the socially optimal position of a dictatorship is characterized by a higher probability of being killed, and a smaller effort to protect politicians.

Compared to the case of parallel social indifference lines, the difference between the social optimum and the actual position in a dictatorship becomes even larger, i.e. a dictator is even more overprotected. Thus, result (1) is strengthened.

Consider now that the assumption of parallel *private* indifference curves is relaxed. It may be argued that due to a selection effect² dictators tend to be more egoistic than politicians in democracies are. This means that they put an even greater value on their survival, and disregard the cost of protection even more than democratic politicians do. The indifference curve of dictatorial politicians becomes flatter than that of democratic politicians. The private optimum moves to the right and downwards for dictatorships. As a result, the distance to the social optimum widens, i.e. dictators spend even more effort for protection than before, and they run a lower risk of being assassinated. Results (1) and (2) are strengthened.

The analysis has identified two crucial aspects of political assassinations.

Firstly, following the economics of crime (Becker 1968, 1974, Cameron 1988) a demand and supply aspect is distinguished. From the point of view of a prospective killer, there is a marginal benefit of assassinating a politician, and there are marginal costs involved in doing so. The point of intersection of the declining marginal benefit and rising marginal cost curves determines the equilibrium number of political assassinations, assuming rational behavior³. The theoretical predictions derived depend on this distinction. If only the demand aspect were to be considered, one would be tempted to conclude that a democratic politician is necessarily less likely to be the subject of an assassination attempt, a conclusion that is *not* drawn here.

Secondly, there are two distinct forces determining the number of political assassinations, the probability of being killed and the protection effort. The possibility frontier connecting the two variables is closer to the origin for a democracy than for a dictatorship. In the extreme case of a perfectly competitive democracy à la Schumpeter (1942) or Downs (1957), the possibility frontier shrinks to a point in the origin. As politicians then are perfectly substitutable, and propose and undertake identical policies, there is no point in assassinating a politician in order to change policy. Consequently, politicians need no protection from assassination⁴. The second force is the location on a given possibility frontier. A democratic ruler is induced to stay closer to the social optimum than a dictator.

² See e.g. Brennan and Hamlin 2000, Cooter 2003, Besley 2006.

³ No discussion of the extent to which attacks on politicians can be considered rational is intended here. This issue is dealt with in Frey 2007; see also the literature on suicide terrorists where this aspect is crucial (e.g. Kennedy 2006, Bloom 2005, Frey 2004, Reuter 2002).

⁴ This only applies to rational killers but not to deranged people. See Frey 2007.

The (little) existing social science research on political assassinations (Feierabend and Feierabend 1966, Feierabend, Nesvold and Feierabend 1970, Feierabend, Feierabend and Nesvold 1973, Snitch 1982, Iqbal and Zorn 2005, 2006, Jones and Olken 2006) tends to neglect the difference between these two aspects, or at least does not make it explicit. Most of these studies, while providing many interesting insights, are not based on an equilibrium analysis in which both aspects are entered, and therefore reach different predictions than the ones made here. Several of the studies do not focus on the difference between democracies and dictatorships. This is, of course, a legitimate point of view. Of those studies doing so, most assume that there exists a systematically higher prevalence of assassinations in dictatorships than in democracies (Iqbal and Zorn 2005, 2006, Jones and Olken 2006). A major reason for the emphasis on assassinations rather than on security measures is that (some) data on political assassinations exist while this is not the case for security efforts.

For various reasons the possibilities for undertaking empirical research in this area are restricted. Difficulties arise not only because the data does not exist, but also because the actors have an active interest in not providing the data, or distorting it systematically. These difficulties refer to both issues, political assassinations and security efforts:

(a) *Political assassinations*. Four different aspects may be distinguished: (i) There may be a demand to kill a politician but the plot has not been seriously organized for several reasons, one of which is that the security measures dissuade; (ii) The assassination is planned but thwarted by the security services before it is undertaken; (iii) The attack is perpetrated but is unsuccessful; and (iv) The attack is carried out and the politician is killed. To get reliable data for case (i) seems to be impossible because the assassination plan exists only in the head of the would-be killer. As the intended action is illegal and subject to heavy punishment (in authoritarian states often a death sentence) it is not likely to be revealed. Thus, to collect data by means of representative surveys tends to be difficult, and is nearly impossible in an authoritarian system⁵. Data on thwarted attempts are subject to the control of the secret services. As argued by Taylor (1988), this is a general problem with criminal statistics. The data may be systematically distorted in two directions. A secret service may claim to have thwarted assassination attempts in order to emphasize its importance. As the attempts were only planned, but not executed, such claims are rather easy to make⁶. The secret service may even claim that it is so efficient that no signs of planned assassinations are visible. But the secret service may also understate the number of assassination attempts in order to prevent imitative actions. Both considerations may apply at the same time so that it is not even possible to discern in which direction the data are manipulated.

Due to the careful work by Iqbal and Zorn (2005, 2006) and Jones and Olken (2006) there are data available for assassination attempts actually exercised as well as the share of “successful” and “unsuccessful” attempts. While they allow fascinating

⁵ MacCulloch and Pezzini 2002 deal with the question posed in the *World Value Survey* asking 130'000 people in 61 nations between 1981 and 1997 about their taste for revolutionary change.

⁶ The same problem arises with planned terrorist actions. The authorities may always claim that they were successful in preventing their execution.

econometric estimates, the quality of the data is not beyond doubt. It is based on event histories collected from three national American newspapers (Archigo data, Goemans, Gleditsch and Chiozza 2005). It is to be expected that some countries are better covered than others. In authoritarian countries without free press it may well be the case that assassination attempts are not revealed to the public, and even actual killings are kept secret (less so when weapons are used, and more so when the politician is poisoned). It is therefore to be expected that the number of planned and actual assassinations is understated in authoritarian systems, which makes a comparative empirical analysis difficult or impossible.

The theoretical analysis developed here requires reliable data on all four aspects of political assassinations, including the most intangible, the desire to kill a politician without taking any action because the dissuasion may be due to the security effort.

(b) *Security effort.* To obtain reliable data on the measures undertaken to protect politicians is extremely difficult. I am not aware of any such data allowing a serious econometric analysis. There are three reasons: (i) The extent of the protection is one of the most secretive activities of any state in order not to allow would-be assassins to gather the information necessary to carry out a successful attack; (ii) The protection effort is difficult to define because there are many different authorities involved, ranging from the secret service to the army and ordinary police; (iii) The burden imposed on the population by security measures is rather evasive as it mainly consists in inconvenience and time loss. In principle the latter costs might be gathered by careful representative surveys.

V. *Conclusions*

The theoretical analysis comes to the conclusion that “politicians are overprotected”. This conclusion is based on the simple insight that the social cost of a political assassination is much higher than its private cost to the politicians, and that the private cost of protection is lower than the social cost. The analysis also allows us to conclude that “authoritarian rulers are more overprotected than democratic politicians”. This conclusion is based on the notion that there is a higher demand to kill authoritarian than democratic rulers and that democratic rulers must stay closer to the social optimum than authoritarian rulers.

What are the possibilities to reduce the overprotection of politicians? Politicians in power have no incentives to reduce these social losses and to come closer to the social optimum. On the contrary, they are strongly induced to deviate from the social optimum. This also applies to politicians not presently in power because they also want to be “overprotected” once they are in power. The only possibility of rectifying the situation is at the constitutional level, where people decide behind the veil of ignorance (Buchanan 1991, Brennan and Buchanan 1980,1985, Mueller 1996), i.e. where the private costs are irrelevant and only the social costs matter. On this level, it is possible to establish rules prohibiting the excessive protection of politicians. However, it cannot be guaranteed that these rules will be observed in the current political process, even in well-established democracies. Politicians’ security has always been an area of state activity about which information has been extremely scarce or even unavailable, except to a small number of persons. Moreover, even if the constitutional rule was able to restrict the monetary expenditures made for politicians’ security, there are still many alternative possibilities. In particular, a

higher share of the cost may be imposed on the general population, e.g. by closing off streets and sections of towns. While the prospects of immediate action must be considered low, this paper may at least put the problem on the agenda of scientific discourse.

References

- Becker, Gary S. (1968). Crime and Punishment: An Economic Approach. *Journal of Political Economy* 76: 497-529.
- Becker, Gary S. (1974). *Essays in the Economics of Crime and Punishment*. New York: National Bureau of Economic Research.
- Besley, Timothy (2006). *Principaled Agents? The Political Economy of Good Government*. Oxford: Oxford University Press.
- Bloom, Mia (2005). *Dying to kill: The allure of suicide terror*. New York: Columbia University Press.
- Brennan, Geoffrey and James M. Buchanan (1980). *The Power to Tax. Analytical Foundation of a Fiscal Constitution*. Cambridge: Cambridge University Press.
- Brennan, Geoffrey and Alan Hamlin (2000). *Democratic Devices and Desires*. Cambridge: Cambridge University Press.
- Buchanan, James M. (1991). *The Economics and Ethics of Constitutional Order*. Ann Arbor: University of Michigan Press.
- Cameron, Samuel (1988). The Economics of Crime Deterrence: A Survey of Theory and Evidence. *Kyklos* 41: 301-323.
- Clarke, James W. (1981). American Assassins: An Alternative Typology. *British Journal of Political Science* 11 (January): 81-104.
- Clarke, James W. (1982). *American Assassins: The Darker Side of Politics*. Princeton: Princeton University Press.
- Cooper, H. H. A. and Lawrence J. Redlinger. (2004). *The Murder of Olof Palme: A Tale of Assassination, Deception, and Intrigue*. Lewiston, NY: Edwin Mellen Press.
- Cooter, Robert D. (2003) Who Gets on Top in Democracy? Elections as Filters. *The Supreme Court Economic Review*: 127-141
- De Witte, Ludo (2001). *The Assassination of Lumumba*. London: Verso Books.
- Downs, Anthony (1957). *An Economic Theory of Democracy*. New York: Harper and Row.
- Feierabend, Ivo K. and Rosalind L. Feierabend (1966). Agressive Behaviors within Politics, 1948-1962: A Cross-National Study. *The Journal of Conflict Resolution*, Vol. 10, No. 3: 249-271.
- Feierabend, Ivo K.; Betty A. Nesvold and Rosalind L. Feierabend. (1970). Political Coerciveness and Turmoil: A Cross-National Inquiry. *Law and Society Review*. Vol. 5, No. 1: 93-118.
- Feierabend, Ivo K.; Rosalind L. Feierabend and Betty A. Nesvold. (1973). The Comparative Study of Revolution and Violence. *Comparative Politics*, Vol. 5, No. 3: 393-424.
- Fetzer, James H. (2000). *Experts Speak Out on the Death of John F. Kennedy*. Peru, Ill.: Catfeet Press.
- Frank, Katherine. (2002). *Indira: The Life of Indira Nehru Gandhi*. New York: Houghton Mifflin.
- Freedman, Lawrence Z. (1965). Assassination: Psychopathology and Social Pathology. *Postgraduate Medicine*. 37: 650-658.
- Frey, Bruno S. (2004). *Dealing with Terrorism: Stick of Carrot?* Cheltenham, UK: Edward Elgar Publishing.
- Frey, Bruno S. (2007). Why Kill Politicians? A Rational Choice Analysis of Political Assassinations. Working Paper, Institute for Empirical Research in Economics, University of Zurich.

- Goemans, Henk E.; Skrede Gleditsch; Giacomo Chiozza and Jinhee Choung
Archigos: A Data Base of Political Leaders. A data gathering project on all
leaders 1875-2004. Version 2.0 completed August 2005.
- Iqbal, Zaryab and Christopher Zorn. (2005). The Political Consequences of
Assassination. Paper prepared for presentation at the Annual Meeting of the
Southern Political Science Association, January 4-7, 2006, Atlanta, GA.
- Iqbal, Zaryab and Christopher Zorn. (2006). Sic Semper Tyrannis? Power,
Repression, and Assassination Since the Second World War. *The Journal of
Politics*, Vol. 68, No. 3: 489-501.
- Jones, Benjamin F. and Benjamin A. Olken. (2006). Hit or Miss? The Effect of
Assassinations on Institutions and War. Mimeo.
- Kennedy, Daniel B. (2006). A Précis of Suicide Terrorism. *Journal of Homeland
Security and Emergency Management* 3, Issue 4 Article 2.
- Laucella, Linda. (1999). *Assassination: The Politics of Murder*. New York: McGraw-
Hill.
- Lentz, Harris M. (1988). *Assassinations and Executions: An Encyclopedia of Political
Violence, 1865-1986*. Jefferson, NC and London: McFarland and Company.
- MacCullough, Robert and Silvia Pezzini (2002). *The Role of Freedom, Growth and
Religion in the Taste for Revolution*. Mimeo, Centre for Health and Well-
being. Princeton University.
- Mueller, Dennis C. (1996). *Constitutional Democracy*. New York and Oxford: Oxford
University Press.
- Mueller, Dennis C. (1997). *Perspectives on Public Choice*. Cambridge: Cambridge
University Press.
- Mueller, Dennis C. (2002). *Public Choice III*. Cambridge: Cambridge University
Press.
- Pape, Robert A. (2005). *Dying to win: The strategic logic of suicide terrorism*. New
York: Random House.
- Posner, Gerald L. (1993). *Case Closed: Lee Harvey Oswald and the Assassination of
JFK*. New York: Anchor.
- Raj, Prakash A. (2001). *Kay Gardeko? The Royal Massacre in Nepal*. Calcutta: Rupa
& Co.
- Reuter, Christoph. (2002). *My life is a weapon: A modern history of suicide bombing*.
Princeton and Oxford: Princeton University Press.
- Schumpeter, Joseph A. (1942). *Capitalism, Socialism and Democracy*. New York:
Harper.
- Sifakis, Carl. (2001). *Encyclopedia of Assassinations*. Rev. Ed. New York:
Checkmark Books.
- Slomich, Sidney J. and Robert E. Kantor. (1969). Social Psychopathology of Political
Assassination. *Bulletin of Atomic Scientists*. 30: 9-12.
- Snitch, Thomas H. (1982). Terrorism and Political Assassinations: A Transnational
Assessment, 1968-90. *Annals of the American Academy of Political and Social
Science*, Vol. 463: 54-68.
- Taylor, Howard. (1998). Rationing crime: the political economy of criminal statistics
since the 1850s. *Economic History Review*, LI, 3: 569-590.
- Tullock, Gordon (1987). *Autocracy*. Dordrecht: Martinus Nijhoff.
- Tullock, Gordon and Charles K. Rowley (2005). *The Social Dilemma: Of Autocracy,
Revolution, Coup D'etat And War* (Selected Works of Gordon Tullock).
Indianapolis: Liberty Fund.

- Wintrobe, Ronald (1990). The Tinpot and the Totalitarian: An Economic Theory of Dictatorship. *American Political Science Review* 84: 849-872.
- Wintrobe, Ronald (1998). *The Political Economy of Dictatorship*. New York: Cambridge University Press.

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