TINPOTS AND TYRANTS: THE EFFECT OF ECONOMIC SANCTIONS ON THE
LONGEVITY OF DICTATORIAL RULE

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Abstract

This study examines the efficacy of economic sanctions in shortening the length of time
dictators stay in power. Using a framework set forth by Ronald Wintrobe, dictators were
characterized into four different types, tinpots, tyrants, totalitarians, and timocrats, so that
sanction efficacy among different types of dictators could be examined. The study used
data of all sanctions between 1914-2007, determining which involved dictators and what
type of dictator was involved. Results suggests that political stability in the country prior
to sanctions imposition, international cooperation in imposing sanctions, as well as the
prior relationship between the two countries all significantly affect the length of time
dictators remain in power. An interesting finding is that the United States being the
imposing country is not a significant deterrent to dictators remaining in power, while
sanctions sent by an international organization are. A main finding is that political
variables, such as those mentioned above, rather than the economic costs or effects of
sanctions, more significantly impact dictators ability to remain in power. Conclusions
reached are that sanctions are most useful against dictators when the country imposing
the sanction has a prior relationship with the target country, and that sanctions should
focus less on an economic impact the sanctions will create, and more on the political
pressure sanctions enforce.

KEYWORDS: (Sanctions, Dictators, Tinpot, Tyrant, Totalitarian, Timocrat)

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CHAPTER I

INTRODUCTION

Some people are contriving ways and means of making us collapse
- Robert Mugabe[1]

President Bashar al-Assad must have been somewhat perplexed to hear on November 27,

2011 that the League of Arab States, or Arab League, the 22 member pan-Arab regional

group, put sanctions in place against his regime. The United States and the European

Union already imposed sanctions in their abhorrence towards the violence of the previous

eight months in the autocracy. But for al-Assad, sanctions should seem somewhat ironic,

that a group of countries including autocracies ranging from a controlling Saudi Arabia to

arguably benevolent Morocco would be sanctioning a fellow Arab product of nepotism.

The Arab League, however, also justified the sanction's goal as avoiding international

intervention. So while the United Nations might impose sanctions to overthrow a

repressive regime, the Arab League put sanctions in place to avoid a precedent of military

intervention in the region. Unluckily for al-Assad, the Arab League decided that, in order

to protect their own autocracies from possible future international intervention they were

willing to support the overthrow of another. As al-Assad learned the hard way, sanctions

are used for a duplicity of reasons. But what effect will sanctions have on his regime?

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[1] Robert Mugabe has been in power in Zimbabwe since 1980.

[2] Hufbauer, Gary Clyde, Jeffrey J. Schott, Kimberly Ann Elliott, and Barbara Oegg. Economic

This study will examine how the type, economic impact, length, and goal of economic sanctions influence the length of time that a dictator is able to preserve his power.

Sanction History

States have used sanctions against each other since long before Assad's headache began. The Megarian decree, imposing economic sanctions in 432 BC in retaliation for kidnapping, had a major role in triggering the Peloponnesian War. In The Acharnians, Aristophanes relates:

> Then Pericles the Olympian in his wrath
> Thundered, lightened, threw Hellas into confusion
> Passed laws that were written like drinking songs
> [decreeing] the Megarians shall not be on our land, in our market, on
> The sea or on the continent…
> Then Megarians, since they were starving little by little, begged
> The Lacedaemonians to have a decree
> Arising from the three strumpets withdrawn[2]

Historically, as in this case against the Megarians, the imposition of sanctions came as a precursor to war. In fact, sanctions prior to World War I largely accompanied or foreshadowed direct warfare.[3] It was only after World War I that the concept of economic sanctions as an alternative to military hostilities rather than a precursor to them became mainstream. Even as late as 1990, George H. W. Bush concedes, economic sanctions against Iraq for the invasion of Kuwait were as a precursor to military action.[4]

Yet even following World War II, economic sanctions were often used to affect military activity by another country. Such was the case in Egypt being persuaded by the

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[2] Hufbauer, Gary Clyde, Jeffrey J. Schott, Kimberly Ann Elliott, and Barbara Oegg. Economic Sanctions Reconsidered. 3rd ed. Washington, DC: Peter G. Peterson Institute for International Economics, 2007. 10.

[3] Ibid.

[4] Hufbauer, Clyde, Schott, Elliot, and Oegg, 11.

U.S. to stop supporting rebels in the Congo and Yemen by withholding development aid.[5]

Hufbauer et al. (2007) reflect that in most instances the attempts at altering military

adventures were unsuccessful, citing Turkish troop occupation of Cyprus despite U.S.

economic pressure.[6]

Throughout the Cold War, the use of economic sanctions were primarily an

attempt to dissuade nations from pursuing nuclear programs. Hufbauer et al. (2007) give

the examples of the United States imposing sanctions of the shipment of nuclear fuel to

Apartheid South Africa, Taiwan, Brazil, Argentina, India and Pakistan. They cite the

success of such measures in the cases of Korea and Taiwan, claiming they had a limited

role in dissuading South Africa, Brazil, and Argentina, and failed in preventing India and

Pakistan from achieving nuclear capabilities. The most successful examples of nuclear

derision given are those of Iraq and Libya. Iraq buckled under UN sanctions, allowing

inspectors to find and destroy Hussein's nuclear capabilities. The other example is

Muammar Gaddafi of Libya, who gave up nuclear hopes to gain American oil drilling

know-how.[7]

In the 1970s, under the leadership of Jimmy Carter, U.S. foreign policy shifted,

possibly historically, with regards to sanctions. Whereas previously held Cold War

ideology proposed that military dictatorships were more amenable to U.S. policy, versus

the risk of a rise of communism from the ashes of a dictator deposed, some repressive

regimes were now pressured through sanctions, and human rights became a priority in

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[5] Hufbauer, Clyde, Schott, Elliot, and Oegg, 10.

[6] Ibid.

[7] Hufbauer, Clyde, Schott, Elliot, and Oegg, 13.

sanctions policy.[8] Repressive regimes, largely in Latin America, were suddenly under

pressure to improve their record on human rights. In the case of Nicaragua, the

withdrawal of military aid contributed to the downfall of Anastasio Somoza. Somoza

acts as a particularly telling example in the Carter Administration shift in policy. While,

prior to Carter, administrations supported the Somoza regime with aid, with Roosevelt

going so far as to attest that "Somoza is a bastard, but he's our bastard". The Carter

Administration cut off aid to Somoza as a form of sanctions, and those sanctions

contributed to his downfall.[9] However, in Paraguay, Argentina, and El Salvador sanctions

brought about neither the downfall of regimes nor any observable change in behavior. In

certain cases, such as Cedras in Haiti and Manuel Noriega in Panama, military

intervention was required to dislodge dictators.[10]

In the past few decades two new foci in the use of sanctions have emerged:

fighting the illicit drug market and anti-terrorism efforts. In anti-drug efforts, the U.S.

operates as the only country, according to Hufbauer et al. (2007), to impose sanctions on

drug producing countries. Through a certification system, which verifies that a country is

doing everything within its power to stem illicit drug production and transhipment, strict

economic sanctions for a country are imposed if they are found non-compliant. While the

program started largely as a routine action it has become more contentious as the number

of non-certifications increased and criticism arose with claims that the process had

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[8] Ibid.

[9] Ibid.

[10] Ibid.

become heavily political, perhaps most prominently displayed in the de-certification of Colombia in 1996 and the continued re-certification of Mexico.[11]

Terrorism has become an increasingly important part of sanctions policy in recent years. Starting in 1980 with the state departments determination that Libya, Syria, Iraq, and South Yemen were supporters of terrorist activities, the United States imposed sanctions on these countries. Over several years, Cuba, North Korea, Iran, Sudan, and Afghanistan were added to this list, with Iraq removed in 2003 following U.S. invasion and Libya removed in 2006 following admissions of responsibility for the Lockerbie bombing and payment of substantial compensation to victims' relatives. Increasingly since the events of September 11, 2001 the U.S. has attempted sanctions against non-state actors, such as al Qaeda, in attempts to restrict funding and operational capabilities.[12] For the purpose of this study, however, the use of sanctions of non-state actors is less prescient, and is thus not thoroughly discussed. From understanding the history of the use of sanctions comes a need to understand sanction efficacy.

<div align="center">Sanction Efficacy</div>

I came in on a tank, and only a tank will evict me
<div align="right">-Abu Zuhair Tahir Yahya[13]</div>

While the literature on sanctions efficacy is quite large, up until 15 years ago most of the literature either examined their efficacy qualitatively on a case by case basis, or

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[11] Hufbauer, Clyde, Schott, Elliot, and Oegg, 15.

[12] Hufbauer, Clyde, Schott, Elliot, and Oegg, 16.

[13] Iraqi Prime Minister, 1968.

purely theoretically.[14] Sanctions have a mixed reputation among the academic, policy, and popular media communities. There are famous examples when sanctions were very successful, notably, contributing to the overthrow of military strongman "El Jefe" Rafael Trujillo in the Dominican Republic, and the politically elected leftists Joao Goulart and Salvador Allende in Brazil and Chile.[15] Famously, however, fellow Latin American dictator Fidel Castro has avoided ceding power despite a near total United States embargo since 1960.

Many economists have called the efficacy of sanctions into question. Perhaps most notably, in one of the more exhaustive studies on the subject, Hufbauer et al. (2007) found a low success rate for sanctions, about a one in three chance of success over the course of the 20th century.[16]

Looking more directly at the types of sanctions imposed in recent years, Hufbauer et al. (2007) notes a shift in sanction targets after the Cold War away from the Soviet Union and its proxies, often towards states experiencing strife, mass killings, and despotic leadership, often in Africa.[17] Hufbauer et al. (2007) recounts that sanctions take on the role of promoting democracy, with the imposition of nearly 30 cases for the purpose of democratization. Fourteen of these cases were on the African continent.

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[14] Dashti-Gibson, Jaleh, Patricia Davis, and Benjamin Radcliff. "On the Determinants of the Success of Economic Sanctions: An Empirical Analysis." American Journal of Political Science 41, no. 2 (1997): 608.

[15] Hufbauer, Gary Clyde, Jeffrey J. Schott, Kimberly Ann Elliott, and Barbara Oegg. Economic Sanctions Reconsidered. 3rd ed. Washington, DC: Peter G. Peterson Institute for International Economics, 2007.

[16] Hufbauer, Clyde, Schott, Elliot, and Oegg, 125.

[17] Hufbauer, Clyde, Schott, Elliot, and Oegg, 126.

Hufbauer et al. (2007) found that success was achieved in nine of these cases, following a

similar trend to the rest of the 20th century, as noted above.[18]

Pape (1998), however, went further, claiming that Hufbauer et al.'s (2007) work

over claims its success rate, and that sanctions were successful in only five cases of 115

attempts, and thus sanctions are overwhelmingly unsuccessful.[19] Pape (1998),

contrasting Hufbauer et. al. (2007) and Escriba-Folchs' (2010) threshold for determining

success in sanctions, finds them to work only if, "(1) the target state conceded to a

significant part of the coercer's demands; (2) economic sanctions were threatened or

actually applied before the target changed its behavior; and (3) no more-credible

explanation exists for the target's change of behavior."[20] While these studies find overall

that sanctions are ineffective at meeting targets, recent writings by Escriba-Folch and

Wright (2010) find sanctions' success on dictators dependent on the type of regime.[21]

Looking beyond the efficacy of the sanction itself, many studies have found other

negative impacts of sanctions on states. Peksen is probably most widely published on the

negative externalities of sanctions. Peksen and Drury (2010) found a decrease in

democratic freedoms in both the short and long terms within sanctioned countries.[22] In

another study, Peksen (2010) found sanctions to have a negative impact on media

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[18] Ibid.

[19] Pape, Robert A. "Why Economic Sanctions Still Do Not Work." International Security 23, no. 1 (1998): 66.

[20] Pape, 97.

[20] Escriba-Folch, Abel, and Joseph Wright. "Dealing with Tyranny: International Sanctions and the Survival of Authoritarian Rulers." International Studies Quarterly 54 (2010): 335.

[22] Peksen, Dursun, and A. Cooper Drury. "Coercive or Corrosive: The Negative Impact of Economic Sanctions on Democracy." International Interactions 36 (2010): 240.

openness.[23] Additionally, Peksen (2011) found that economic sanctions negatively

impact public health conditions, and that the more costly the sanctions are to the target

the larger the negative impact on health will be. This study also found an increase in the

negative impact on public health if the sender was the United States.[24] From this

understanding of the literature surrounding sanction efficacy it is possible to move

forward towards understanding how exactly how to define and categorize dictatorship.

<div align="center">Dictators</div>

 While studying dictatorship might superficially seem tangential or unimportant in the

modern era of democracy, Wintrobe (1998) points out, "most of the world for most of

human history has lived under dictatorship."[25] Even in the modern nation state system, it

is dictators who rule over some of the most afflicted areas on our planet and who prove to

be the bad actors both against their own states and aggressively towards others. But to

study dictatorship and autocracy it is essential to first determine what defines a dictator.

While there is an extensive literature defining dictatorship from the fields of

history, political science, psychology, economics, and even fiction, it is perhaps most

helpful and enlightening to defer to the characterization of a dictator put forth in the

principal work on the subject, *The Political Economy of Dictatorship,* by Wintrobe.

Rather than an overarching or simple model of dictatorship by surveying the literature,

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[23] Peksen, Dursun. "Coercive Diplomacy and Press Freedom: An Empirical Assessment of the Impact of Economic Sanctions on Media Openness." International Political Science Review 31 (2010): 449.

[24] Peksen, Dursun. "Economic Sanctions and Human Security: The Public Health Effect of Economic Sanctions." Foreign Policy Analysis 7 (2011): 237.

[25] Wintrobe, Ronald. *The political economy of dictatorship*. New York, New York: Cambridge University Press, 1998.

Wintrobe uses images of dictatorship which are historically reoccurring. The four variations of dictatorship he splits into four types: totalitarianism, tinpots, tyranny, and timocracy.

Totalitarians: Mussolini, Stalin, and Kim Jong-il

Totalitarianism is characterized by Wintrobe, following Hannah Arendt, as "the possibility of being completely subjected, in every sphere of life, to domination by the state."[26] Wintrobe determines that the Soviet Union, more-so than Hitler's Germany or Mussolini's Italy, reflects the closest characterization of totalitarianism, the forces of which he says can still be witnessed in Asia. Namely, "a mysterious group loyalty of the citizenry to the state or to the firm, an alleged superior capacity to make collective decisions, and an apparent ability to control the economy in socially beneficial ways of which no democracy is deemed capable, all buttressed by impressive statistics on economic growth."[27] Wintrobe characterizes totalitarian regimes economically, by their command nature, in which "all decisions are made centrally and filter through ranks to those responsible for doing the actual work.[28] While Wintrobe finds there is no fully applicable example of totalitarianism, such that the regime type seems theoretical or at least watered down in practice, he finds no such struggle when characterizing tinpot regimes.

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[26] Wintrobe, Ronald. *The political economy of dictatorship*. New York, New York: Cambridge University Press, 1998.

[27] Wintrobe, 11.

[28] Wintrobe, 8.

The Tinpots: Noriega, Marcos, and The Shah

Second in Wintrobe's categorization of regimes is that of the tinpots, those regimes in which are "unstable, chimeric, short-lived, or weak dictatorships."[29] Tinpot regimes repress their populace only to the point necessary to maintain power and stay in office to collect "the fruits of monopolizing political power."[30] By repressing to this limited extent they are able to rule without disturbing the social fabric or "traditional way of life" of the people.[31] Wintrobe includes the common African and Latin American dictator under this distinction, also including sultanism, patrimonial rulers, and personal rule under this jurisdiction.[32] Wintrobe specifically includes such ex-dictators as General Noriega of Panama, the Shah of Iran, and Ferdinand Marcos of the Philippines as examples of tinpots. Wintrobe starkly contrasts tinpots with tyrants, who use a high amount of repression, unlike tinpots, but not to the level of totalitarianism.[33]

The Tyrants: Amin, Mobutu, and Duvalier

Tyranny, is "a regime in which repression is high but which lacks or abjures the instruments of mass communication and control that make totalitarianism possible".[34] Those who keep themselves in power through violence, who instill policies which are contrary to the material interests of a section of his subjects, and includes a leader who is

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[29] Wintrobe, 11.

[30] Ibid.

[31] Ibid.

[32] Ibid.

[33] Wintrobe, 12.

[34] Wintrobe, 13.

pleased by the servitude imposed upon subjects. Synonymous with despotism, this list

includes many European monarchs of the 17th and 18th centuries, and in the modern world

Duvalier in Haiti, Mobutu in Zaire, Amin in Uganda, and Selassie in Ethiopia.[35]

Characterizing dictators is part art and part science to Wintrobe, who cites their seeking

of legitimacy through titles including "The Guide" for Mobutu, "Conqueror of the British

Empire" for Amin of Uganda, and possibly the one best suited for introducing a boxer

into the ring, "The Elect of God, Son of David, Son of Solomon, King of Kings, and Lion

of Judah" Haile Selassie.[36] From tyrants, Wintrobe concludes with a final group, which

he concedes is probably also largely mythical, that of the timocracy.

The Timocrats: Castro and Lee Kwan Yew

Timocracy, borrowed from Plato's "The Republic", comes from the root Thymos,

meaning "to love". Timocracy refers to so called "benevolent dictators", or those who

generally care for their people. While he cites that they in fact may not exist, he claims

that the idea has long captured the popular imagination, the "benevolent dictator" or

"philosopher-king".[37] Fidel Castro, the Nicaraguan Sandinistas "in their salad days" as

well as Lee Kwan Yew of Singapore and Pinochet of Chile, who Wintrobe, perhaps

understatedly, refers to as "stern but growth oriented," are given as possibilities of

timocrats.[38] Including the intent or personal emotional state of the timocrat as

justification of the typifying of their regime seems somewhat perplexing, as truly

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[35] Ibid.

[36] Ibid.

[37] Wintrobe, 14.

[38] Ibid.

knowing whether Lee Kwan Yew loved his people and Haile Selassie did not is impossible. Rather, Wintrobe clarifies that Timocracies are characterized by "a regime whose repression is low but which produces a dictator who is capable of staying in office because his or her love for the people is reciprocated by them."[39] Or at least, their *apparent* admiration is reciprocated, and is enough to allow them to avoid physical repression. By all marks, until the need for force, Assad of Syria could have been thought to love his people, until he was unable to maintain power without killing large numbers of them. The same could be said for Muammar Gaddafi, showing a grey area between timocrats and tyrants.

While these distinctions of the spectrum of dictators are important to understanding the literature, as well as comparing dictators amongst themselves, the study will likely have to make general judgements, as many dictators could have characteristics of several dictator types, and thus the previous explanation of dictator types should serve as a general guide, rather than a rule book.

<div align="center">Measuring Sanctions against Dictators</div>

But it is important to observe that when Europe or the United Nations impose sanctions that are supposed to be aimed against a certain regime, usually generally millions of people end up being directly punished.
- Omar Bongo (In Power 1967-2009)[40]

Perhaps the most parallel study to the one being attempted examines the effect of economic sanctions on the length of civil conflicts, finding a negatively and significant association between economic sanctions and civil war length. Escriba-Folch (2010) uses

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[39] Ibid.

[40] Omar Bongo was in power in Gabon for 42 years, making him one of the longest ruling dictators in the history of the world.

a third-party intervention perspective to model the potential impact of sanctions. Escriba-Folch models each party's "expected utility of continued fighting at a given time" as:

$$EU_F = p_e Uv + (1 - p_e)U_D - EC_F$$

where p_e is a party's estimated probability of winning,
U_V is the utility of victory,
U_D is the utility of being defeated, and
EC_F is an estimation of the costs of fighting.[41]

In his first analysis he uses a binary variable to indicate whether war ended in that year. For the second part of his analysis, he codes the mode of conflict termination with three values: 0 if conflict continues, 1 if conflict is resolved through military means and 2 if peace is negotiated.[42] He adjusts for physical characteristics in the country, GDP, contraband financing, and includes a dummy variable to control for accompanied military intervention with economics sanctions. He then runs binary logistical regressions to find the likelihood of conflicts ending, and multinomial regressions to analyze how the conflict ends, finding a substantial and significant correlation between economic sanctions being employed and the length of conflicts.[43] Escriba-Folch's (2010) organization of time data for a change in circumstances will be useful in examining dictator tenure.

Kaempfer, Lowenberg, and Mertens (2004) use Wintrobe's dictatorship model to examine the effect of economic sanctions on a dictator. They find that the magnitude of sanctions have direct and indirect effects on the prices of buying loyalty and repression

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[41] Escriba-Folch, Abel. "Economic sanctions and the duration of civil conflicts." Journal of Peace Research 47, no. 2 (2010): 129.

[42] Escriba-Folch, 134.

[43] Escriba-Folch, 135.

by a dictator, and also find that sanctions can potentially create rents which can be captured by the dictator or by opposition.[44]

In another study looking specifically at the behavior of different types of dictators, and dictators compared with other types of regimes, Escriba-Folch and Wright (2010) find that the type of regime on which sanctions are imposed factors heavily into the response. They find that personalist regimes and monarchies are more sensitive to external losses of revenue and are destabilized by such actions. They find that military regimes and dominant single-party regimes are able to reallocate expenditure and increase tax revenues to effectively maintain control.[45]

Marinov, who has recently published significantly on sanctions effects on dictators, adds much to the conversation. First, Marinov (2005) finds that sanctions are more likely to coerce than previously thought, pointing out that the leader of a government is more likely to lose office in a given year if he/she is under economic pressure then those who are not, and that economic sanctions do have a destabilizing power.[46] Marinov (2002) finds that countries in adversarial positions can and do cooperate economically, rather than the conventional wisdom that the more adversarial countries are, the less they would economically cooperate and interact. The same study finds that when sanctions do end, it is "seldom due to a fundamental reduction in the

[44] Kaempfer, William H., Anton D. Lowenberg, and William Mertens. "International Economic Sanctions Against a Dictator." Economics and Politics 16, no. 1 (2004): 29.

[45] Escriba-Folch, Abel, and Joseph Wright. "Dealing with Tyranny: International Sanctions and the Survival of Authoritarian Rulers." International Studies Quarterly 54 (2010): 335.

[46] Marinov, Nikolay. "Do Economic Sanctions Destabilize Country Leaders?" Midwest Political Science Association 49, no. 3 (2005): 564.

level of mutual threat."[47] Lastly, and perhaps most significantly, Marinov and Goemans (2008) in a preliminary working paper, argue that weak states, or (for the purpose of this study) states with which tinpots take power of, make it easy for coup-plotters to grab power and delay re-democratization.[48] This would suggest that the evidence will show a longer tenure for tinpot scenarios. Marinov and Goemans argue that weak states are easier to gain power in and maintain power over.

This chapter reviewed the literature of sanctions, their efficacy, dictators, and economics sanctions effects on dictators. Chapter 2 presents the theory relevant to studying economic sanctions on dictators. Chapter 3 presents the methodology used for examining the data in this study, as well as the constraints to the data. Chapter 4 presents the analysis of the study. Chapter 5 presents conclusions reached, as well as possible areas for further study.

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[47] Marinov, Nikolay. "Allies, Adversaries and International Economic Sanctions." American Political Science Association (2002).

[48] Marinov, Nikolay and Hein Goemans. "What Happened to the Coup d'Etat? International Responses to the Seizure of Executive Power." Working paper delivered at ISA 2008 and Midwest 2008.

CHAPTER II

THEORY

There is a paucity of studies involving sanctions and dictators. One of the most

comprehensive examinations of sanctions, Hufbauer et al. (2007), did not apply advanced

econometric analysis until the third addition, using only ordinary least squares (OLS)

analysis or tabulations of means. Even in the most recent edition, the econometric

models of Hufbauer et al. are binary outcome models and categorical data analysis.[49]

Wintrobe (1998), as well as others utilizing his technique, employ a utility model to

examine the costs of buying repression and loyalty by a dictator.[50] Recent literature on

dictator power longevity utilizes survival models to analyze what pressures may be acting

to remove dictators from power. Survival models are used to examine prison recidivism,

the survival of various species, and the ability of workers to stay employed.[51]

The Cox proportional-hazards model allows for the analysis of several risks

factors' effects on survival. The probability of the endpoint, in this instance political

death, is modeled as:

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[49] Hufbauer, Gary Clyde, Jeffrey J. Schott, Kimberly Ann Elliott, and Barbara Oegg. *Economic Sanctions Reconsidered.* 3rd ed. Washington, DC: Peter G. Peterson Institute for International Economics, 2007.

[50] Wintrobe, Ronald. *The political economy of dictatorship.* New York, New York: Cambridge University Press, 1998.

[51] Albert, Vicky; King, William. "Citizenship Status and TANF Exits: A Proportional Hazard Model." *Journal of Social Service Research* 37 no. 3 (2011): 294.

$$H(t) = H_0(t) * exp(b_1 X_1 + b_2 X_2 + b_3 X_3 + ... + b_k X_k)$$

where X_1 ... X_k are predictor variables, such as political instability or sanction cost, and

$H_0(t)$ is the baseline hazard for a person at time t.[52]

In this methodology $H(t)$ is the hazard, i.e. the probability of political death taking place.

$H_0(t)$ is the level of hazard if none of the variables have an effect on survival. Essentially

this model examines to what degree each variable affects the survival of dictatorial

power. Before employing such a method, however, the likely variables that might act as

illness on a dictator's political longevity must be accounted for. Thus employing a hazard

model without first assessing what the baseline probability, and the hazard level of each

variable must be assessed. With this in mind, for the purposes of this study, an ordinary

least squares (OLS) model, which is capable of indicating which variables are significant

to the dictator's tenure length, is employed. This model will be helpful in building a

groundwork for assessing a baseline hazard, weighted hazards, and the probability of

political death for use in the construction of a hazard model in the future. First, an

understanding of what variables could be relevant should be discussed. While chapter

three will focus on the construction of variables which are used for this study, this chapter

will focus more generally on the types of variables which are included, and how the

literature and theory support their inclusion.

<div align="center">Political Variables</div>

There are six political variables taken into account in Hufbauer et al. The political

variables included in the data are: the presence of companion policies beyond routine

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[52] Concato, John; Peduzzi, Peter; Holford, Theodore R., Feinstein, Alvan R. "Importance of events per independent variable in proportional hazards analysis I. background, goals, and general strategy." In *Journal of Clinical Epidemiology* 48, no. 12 (1995): 1495.

diplomacy, extent of international cooperation with the sender, whether an international institution cooperated with the sender, the presence of offsetting international assistance to the target (i.e. Cold War Soviet support to Cuba), prior relations between sender and target, and the nature of the regime which sanctions are being imposed upon.[53] Some literature suggests sanctions are more effective when employed unilaterally rather than multi-laterally, so this variable should be included also.[54] As the economic impact of the sanctions would be counter-acted should there be offsetting assistance, taking this variable into account is necessary as well. International assistance to targets would likely play a less important role since the end of the proxy system of the Cold War. However, proxy allegiances still take place, such as China's heavy investment and business in Sudan, which has undercut the United States' and international communities' economic sanctions against the country. The study draws upon Wintrobe's (1998) categorization of dictatorial regimes and differentiating among these types of regimes. This study will between sanction instances involving tinpots, tyrants, totalitarians, and timocrats to examine how different types of dictatorship respond to economic pressures.

<div align="center">Economic Variables</div>

The economic variables which Hufbauer et al. (2007) include are: trade linkages, types of sanctions (trade, financial, or asset freezes), economic health and political stability of target countries, cost of sanctions to target, and costs of sanctions to senders.

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[53] Hufbauer, Gary Clyde, Jeffrey J. Schott, Kimberly Ann Elliott, and Barbara Oegg. *Economic Sanctions Reconsidered.* 3rd ed. Washington, DC: Peter G. Peterson Institute for International Economics, 2007.

[54] Dashti-Gibson, Jaleh, Patricia Davis, and Benjamin Radcliff. "On the Determinants of the Success of Economic Sanctions: An Empirical Analysis." *American Journal of Political Science* 41, no. 2 (1997): 608.

They quantify what level of trade took place prior to the imposition of sanctions. They include what types of sanctions are employed, which becomes useful in differentiating between types of sanctions, as much of the recent literature on so called "smart sanctions" efficacy in driving dictator behavior. They employ an economic health and political stability metric, which would likely be the best way of taking into account the domestic pressures on dictators' possibility of political death.

Drawing on each of these strands of the literature, the model to be tested here is formulated as

$$Dt = (b_0 + b_1 X_1 + b_2 X_2 + b_3 X_3 + \ldots + b_k X_k) + E$$

Where Dt signifies dictator tenure length,
b_0 indicates a constant term
X_1 signifies trade linkages,
X_2 measures types of sanctions,
X_3 measures economic health,
X_4 measures political stability,
X_5 measures cost of sanctions to target,
X_6 measures cost of sanctions to sender
E is an error term.

The economic variables of trade linkages, types of sanctions, economic health and political stability of target countries, cost of sanctions to target, costs of sanctions to senders are all quantified by Hufbauer et al. using a core gravity model, and this study will use draw upon this research, using these measures for these variables.

The prediction is that all economic variables will have more significance than political variables, as sanctions aim to directly affect these variables very directly and quickly.

In this chapter the theory of proportional hazards has been proposed to examine the longevity of dictators' power in the future, with this study using an Ordinary Least

Squares (OLS) model to build the framework for further study. Both political and economic variables have been proposed to attempt to account for or model the effect which sanctions have on dictators, and defenses for why these variables may prove important are given. In the next chapter the methodology employed and an analysis of the positive aspects as well as shortcomings of the data will be examined.

CHAPTER III

DATA

The purpose of this chapter will be to describe the data sources used to test the

theory put forth in the previous chapters. This chapter will explain the time frame and

nature of the data set, as well as explain each variable.

Data Set

The data used in this study was constructed by Gary Clyde Hufbauer, Jeffrey J.

Schott, Kimberly Ann Elliott, and Barbara Oegg at the Peterson Institute for International

Economics and published and distributed through the book *Economics Sanctions*

Reconsidered, 3rd Edition (2007). The data set analyzes 174 cases of economic sanctions

and over 204 episodes. As certain sanctions were instituted as separate phases or with

more than one policy objective, these are cited as multiple episodes but as part of one

case in the data set. Thus, the United States sanctioning both Ecuador and Peru can be

seen as one case of sanctions, but would count as two episodes of sanctions, with separate

variables for each country. This set of data consists of the most detailed database on the

global use of sanctions of its kind (though Nikolay Marinov's data is often cited as

similarly comprehensive, the variables examined and manner that it is compiled are not

directly comparable). The first case in the data set is the United Kingdom sanctioning

Germany during World War I, thus the data set examines sanctions from 1914 until its

publication. Each case is analyzed using political and economic variables taken from

Hufbauer, Schott, Elliott, and Oegg's data set, with additional variables incorporated by the author.

Dependant Variable

The dependent variable in this study is the length of time a dictator is in power (dictator_length). As the goal of the study is to examine how economic sanction effect dictators' ability to stay in power, and particularly how economic sanctions affect the length of time different types of dictators are able to stay in power, time, measured in years, is the dependent variable.

Independent Variables

The independent variables in the data set are separated by political variables, economic variables, and general variables. While all are equally important, economic variables are often easier to quantify. In this study, where judgment calls are made in estimating political variables, deference is given to the data set estimations, rather than attempting to re-quantify political variables.

Political Variables

The first independent variable in the model is companion policy measures. This variable examines whether contributing policy measures besides economic sanctions, namely, military activity was present which would impact the sanctions effect (militaryaction). A dummy variable is utilized which represents military action where a "1" represents military action, and a "0" no military action. This variable (militaryaction) was compiled by the author using several variables from Hufbauer et al.'s dataset. While the original dataset has three dummy variables indicating the presence of different types of military actions, including covert maneuvers, quasi-military activity, and regular

military action, early tests found high collinearity among these variables, and so they have been condensed into one variable (militaryaction) which indicates the presence of a military action of any type. While this decreases the ability to examine among these variables the effect on dictator tenure length, the new variable has more instances and avoids collinearity, and allows for some indication of military activities effect of dictator tenure.

The second political independent variable is the extent to which there was international cooperation in imposing sanctions (internationalcooperation). This variable is scaled from "1", indicating no cooperation, with an example being the United State's unilateral sanctions against Panama for the purpose of de-stabilizing Noriega in 1987, to a "4", indicating a significant amount of international cooperation. An example of a "4" is the United Nations, United States, and the European Community's sanctioning of Yugoslavia due to the civil war in Bosnia in 1991. A "1" therefore, indicates no cooperation, while a "2" indicates a minor degree of cooperation, usually via verbal support or token restraints. A "3" indicates modest cooperation, usually meaning other countries offer restraints, but these are limited in time and severity. Additionally, a "3" indicates the level of importance, as trading partners, the international actors are. A "3" indicates that at least some important trading partners are taking part in the sanctions. A "4", as previously mentioned, indicates significant international cooperation. This variable was taken from the Hufbauer et al. (2007) dataset.

The third independent variable, also supplied by Hufbauer et al. (2007), is the level of involvement of international organizations. This variable is not treated by degrees, but rather as several dummy variables. A first dummy variable indicates

whether or not an international organization is a sender of sanctions, with a "1" indicating an international organization is a sender, and a "0" indicating an international organization in not a sender (intorgsender). The second dummy variable signifies whether both the sender and the target are both members of the sanctioning international organization, with a "1" indicating that both the countries sending the sanctions and the target of the sanctions are members of the international organization involved, and a "0" indicating that either the sender, the target, or both are not members of the international organization (intorgsenderandtargetmembers).

The fourth independent political variable, also from Hufbauer et al. (2007), is the presence of international assistance received by a target country (internationalassis). Assistance in many cases is essentially a patron country supporting a similarly allied country. The Soviet Union's support of Cuba during sanctions is an example of international assistance. This is constructed as a dummy variable where "1" signifies a sanctioned country receiving international assistance, whereas a "0" indicates a lack of international assistance.

The fifth independent variable is the relationship between the sending and target country prior to the sanctions episode (priorrelationship). This variable, also compiled by Hufbauer et al. (2007), is scaled from a "1" to a "3". A "1" indicates an antagonistic relationship, meaning the sender and the target countries have deep ideological divides. Hufbauer describe an antagonistic relationship as the sender and target countries being "in opposing camps". Examples given of this level are US-Japan relations prior to World War II, Arab-Israeli relations, and US relations with Cuba, North Korea, and Iran for the last several decades. A "2" indicates a neutral relationship, usually marked by a

workable relationship but no strong ties. An example would be the US relationship with Saddam Hussein's Iraq prior to the invasion of Kuwait. A "3" indicates a cordial relationship.

Another political variable included in the dataset, also from Hufbauer et al. (2007), is the political stability prior to the sanctions imposition (priorpoliticalstability). This was constructed by tracking the number of regime changes for 10 years prior to the imposition of sanctions and then dividing by 10. Thus any country with a score of 0.0 had more stability and no regime changes, while a 0.5 indicates 5 regime changes over the 10 years prior to the sanctions imposition. Similar to the prior political stability variable, a variable also from Hufbauer et a. (2007), estimating the political stability during the sanctions (politicalstabilityduring) is figured in the same way.

Further, five dummy variables were included from Hufbauer et al. for the different foreign policy goals of the sender country: modest policy changes (_foreignpolicygoal1), regime change and democratization (_foreignpolicygoal2), disruption of military adventures (_foreignpolicygoal3), military impairment (_foreignpolicygoal4), or other major policy changes (_foreignpolicygoal5). In each case a "1" is indicated if that particular policy goal was the goal of the sanctions, while "0" signifies it is not.

The last political variables taken into account are all based upon the political character of the target country's government. This variable was compiled by the Polity IIId database by Ted Gurr et al. The Polity project has five dimensions it focuses on to determine a political system's authority:

> (1) the influence relations between superordinate and subordinate strata; (2) the degree of inequality between the strata; (3) the institutional relations among superordinates; (4) the competitiveness of recruitment to superordinate

positions; and (5) the basis of political legitimacy, whether personal, substantive or procedural.[55]

This framework is used by Hufbauer et al. as the basis for the variables regime type, regime coherence, and regime durability (regimetypebookfigure) (regimetypebookpolity2) (regimetypebook3). Regime type is determined by focusing on institutional dimensions of democracy. By focusing on the competitiveness of political participation, the regulation of political participation, the openness and competitiveness of executive recruitment, and institutional constraints on the exercise of executive power, Gurr establishes a scale ranging from "+10" to "-10" to denote purely democratic to purely autocratic states. This scale was then condensed by Hufbauer, with a scale of "1-3", with "1" meaning autocracy and "3" meaning democracy. The simplified Hufbauer et al. model is used in the dataset for the purpose of this study.

<div align="center">Economic Variables</div>

The first independent economic variable, from Hufbauer et al., is the cost of economic impact on the target country. This cost is expressed in millions of US dollars at the time of publication, meaning roughly 2007 (costtotarget), as a percentage of Gross National Product (costtotargetpercentGNP), and in per capita terms (costtotargetpercapita). All of these variables were also compiled by Hufbauer et al. This cost is calculated by evaluating the consumer surplus lost due to sanctions. This requires determining the price elasticity of demand and supply for the goods that are being sanctioned. To determine the overall sanction cost, Hufbauer et al. first estimate

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[55] Hufbauer, Gary Clyde, Jeffrey J. Schott, Kimberly Ann Elliott, and Barbara Oegg. Economic Sanctions Reconsidered. 3rd ed. Washington, DC: Peter G. Peterson Institute for International Economics, 2007.

the initial deprivation of markets, then estimate a "sanctions multiplier" based upon the elasticity's of demand and supply.

Additionally, an economic variable, also from Hufbauer et al., for the GDP growth in the target country is an average for the five years prior to the initiation of sanctions (gdpgrowthpercent5yearaverage). As well, a variable indicating the inflation rate is the average rate of inflation during the three years prior to the initiation of sanctions is included (inflationpercent).

Another independent economic variable is the relative economic size of the countries, measured by comparing the sender and targets GNP (GNPratio). This variable also came from the Hufbauer et al. dataset.

The commercial relations between the sender and target countries is another economic variable from the Hufbauer et al. dataset, displayed as a percentage of each countries international trade, prior to the imposition of sanctions (tradelinkage).

Fifth, economic health and political stability of the country receiving sanctions are quantified as an independent economic variable (Healthandstability). Hufbauer et al. make this estimation and quantify it on a scale from "1" to "3". Countries with rampant inflation, high unemployment, and political turmoil or chaos, such as Uganda in the later years of the Amin regime, are characterized as being distressed and given a "1". A "2" characterizes countries which are experiencing significant problems and substantial internal dissent, but are not bordering on chaos, such as Ceylon under S. W. R. D. Bandaranaike. A "3" distinguishes nations which are strong and stable, a country with a strong economy (though it may be experiencing normal ills of unemployment or

inflation) and a government in firm control. China at the time of the Tiananmen Square massacre may be given as an example.

Another independent variable, also from Hufbauer et al., is the type of sanctions employed. Three dummy variables are included which indicate whether or not the sanctions were an interruption of exports, imports, finance, or some combination of these (sanctiontypefinance) (sanctiontypeexport) (sanctiontypeimport). In each variable "1" indicates the presence of this sanction type (finance, exports, or imports), while a "0" indicates this type of sanction not being employed.

A last variable is the cost to the country sending or initiating the sanctions (costtosender). This variable, also compiled by Hufbauer et al., is accessed on a scale of "1" to "4". This is an estimation of the economic and political pain endured by the sender country which they must endure when implementing sanctions. A "1" indicates a net gain to the sender as the US experienced with the suspension of aid to Turkey in 1974. A "2" indicates that there is little effect on the sender, usually a small economic gain and little political consequence. A "3" indicates a modest loss to the sender, where trade loss and political backlash are present but not overwhelming. A "4" indicates a major loss to the sender both economically and politically.

<div align="center">General Variables</div>

There were several other general variables in the data set, all coming from the Hufbauer et al. dataset, including dummy variables for cases in which the US is a sender, where "1" indicates the U.S. is a sender and a "0" indicates it is not (UScase), if the US is a unilateral sender where "1" indicates a case where the U.S. is the only sender and a "0"

where this is not the case (usunilateralcase). Another variable signifies whether there was

the presence of a second sender (secondsenderpresence), and the presence of a third

sender (thirdsenderpresence), where a "1" indicates a second or third sender and a "0"

indicates a lack of second or third sender presence.

Another variable, also from Hufbauer et al., examines the policy result of the

sanctions and is scaled from 1-4 indicating how much of a policy change came from the

sanction (policyresult). A variable also ranging 1-4 and also from Hufbauer et al.

indicates to what levels the sanctions contributed to this policy result

(sanctionscontribution). A third variable from Hufbauer et al. multiplies the policy result

and sanctions contribution for a sanction 'success score' variable ranging from 1-16

(successscore).

Another general variable measures, in years, the length of the sanction

(Sanction_Length). This variable was constructed by the author from Hufbauer et al.

indicating the sanctions starting year and ending year. For the purpose of this study

sanction length before a dictator is in power are not relevant, nor are sanctions which

continue after a dictator has left power, so sanctions which started before a dictator came

to power are counted as starting when the dictator came to power, and sanctions which

continue past the dictators tenure are included as ending with the dictators tenure. These

changes in Hufbauer et al.'s data were only necessary in 20 instances, and were made by

the author. Often, these adjustments only changed the length by a few years.

As the study attempts to study tenure length of dictators by type of dictator, four

dummy variables, with "1" indicating whether a dictator is a totalitarian (_dictatortype2),

tinpot (_dictatortype3), tyrant (_dictatortype4), timocrat (_dictatortype5), or not a dictator (_dictatortype1) were created by the author. A "0" in each case indicates this dictator type not being present in this case. It quickly became apparent in the process the difficulty of fitting complex leaders who often ruled for years or decades into convenient boxes. However, for the purpose of the study, a best judgment was made, and notes for when justification seemed necessary are included in the appendix. Additionally seven dummy variables for how each dictator left power. These scenarios were if a dictator steps down (_wayofleavingpower2), gets killed (_wayofleavingpower3), gets democratically elected (_wayofleavingpower4), is forced from power but not killed (_wayofleavingpower5), does not leave power and the sanctions are withdrawn (_wayofleavingpower6), does not leave power and the sanctions have not yet ended (_wayofleavingpower7). Scenarios not involving dictators were coded also (_wayofleavingpower1). These variables were compiled by the author from a variety of sources and in each case a "1" indicates the dictator leaving power in the manner described above and a "0" indicating this way of leaving power not being present in this case.

These variables are employed into the model put forth in the theory section to examine whether or not economic sanctions affect dictators' ability to stay in power as opposed to non-dictators, and utilize Wintrobe's theoretical model to examine whether the type of dictator affects their tenure as well.

Before employing the data discussed into the model, preliminary statistics of the dataset are taken to make sure that no significant problems exist. Below, a table indicating these statistics, including the number of observations, the mean, the standard

deviation, and the minimum and maximum, reflect no significant problems with any of the variables. As many of the cases included in the dataset do not include dictators, the number of observations of dictator length is much less than many other variables. This is to be expected and does not reflect a flaw in the data. Rather, the maximum number of cases which can be examined in the following models, as they pertain to dictators, is 121. The rest, while unnecessary, were left in the dataset as they could prove useful in other future study.

Table 3.1: Preliminary Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
dictator_length	121	29.86777	23.68612	0	79
UScase	202	0.683168	0.466397	0	1
usunilateralcase	202	0.341584	0.475419	0	1
policyresult	202	2.638614	1.125504	1	4
sanctionscontribution	202	2.445545	0.759356	1	4
successscore	202	6.920792	4.188787	1	16
internationalcooperation	202	2.094059	1.090923	1	4
intorgsender	202	0.257426	0.438302	0	1
intorgsenderandtargetmembers	202	0.222772	0.417141	0	1
sanctionlegnth	202	6.945545	9.537149	1	60
priorrelationship	202	2.094059	0.750499	1	3
regimetypebookfigure	197	-2.99492	21.87149	-88	10
regimetypebookpolity2	197	-1.6802	6.825393	-10	10
regimetypebook3	197	1.77665	0.821188	1	3
priorpoliticalstability	197	0.151269	0.214193	0	1
politicalstabilityduring	197	0.082234	0.194409	0	1
costtotarget	191	488.4051	2110.866	-182	18800
costtotargetpercentGNP	191	2.831126	6.76381	-6.3	54
costtotargetpercapita	191	32.7351	122.583	-6.45	1093
tradelinkage	201	30.44727	28.21913	0	100
GNPratio	202	1907.494	6841.891	0.04	50869
Healthandstability	202	1.99505	0.749776	1	3
costtosender	202	1.945545	0.805457	1	4
gdpgrowthpercent5yearaverage	184	3.171196	4.681015	-19	33.3
inflationpercent	163	99.24479	510.6798	-4.4	5066.9

_dictatortype2	202	0.183168	0.387766	0	1
_dictatortype3	202	0.09901	0.299417	0	1
_dictatortype4	202	0.292079	0.455848	0	1
_dictatortype5	202	0.074257	0.262841	0	1
_wayofleavingpower2	202	0.163366	0.370618	0	1
_wayofleavingpower3	202	0.054455	0.227478	0	1
_wayofleavingpower4	202	0.044555	0.206836	0	1
_wayofleavingpower5	202	0.113861	0.318432	0	1
_wayofleavingpower6	202	0.188119	0.391778	0	1
_wayofleavingpower7	202	0.069307	0.254606	0	1
_wayofleavingpower8	202	0.014852	0.121259	0	1
_foreignpolicygoal1	202	0.212871	0.410354	0	1
_foreignpolicygoal2	202	0.391089	0.489207	0	1
_foreignpolicygoal3	202	0.094059	0.292637	0	1
_foreignpolicygoal4	202	0.143564	0.351519	0	1
_foreignpolicygoal5	202	0.158416	0.366038	0	1
secondsenderpresence	202	0.292079	0.455848	0	1
thirdsenderpresence	202	0.059406	0.23697	0	1
militaryaction	202	0.331683	0.471988	0	1
internationalassis	202	0.193069	0.395688	0	1
sanctiontypefinance	202	0.747525	0.435512	0	1
sanctiontypeexport	202	0.608911	0.489207	0	1
sanctiontypeimport	202	0.445545	0.498261	0	1

Source: Author's calculations.

This chapter has examined the sources of data used to test the theory put forth in the previous chapters. The next chapter will analyze the results of the study, and the fifth chapter will discuss conclusions to the study, limitations to the study, and areas for further research.

CHAPTER IV

ANALYSIS

The purpose of this chapter will be to explore the analysis and results from the
model and data discussed in the previous chapters. This chapter will describe the
variables in each model, what was included and excluded from each model, and the
results from each model.

Several models were constructed. First, a general model examines how sanctions
affect dictator length among all dictators. Second, a pared down model examines how
much of dictators tenure length can be explained through only a few of the most
significant variables. Models were then constructed which included each type of dictator,
so as to examine how economic sanctions affect each individual type of dictator. Due to
the small number of observations for two types of dictators, tinpots and timocrats, this
could only be attempted for the tyrant group of dictators and the totalitarian group of
dictators. Once this was done, these models were consolidated to make them compatible
with each other, so that coefficients could be compared directly.

The General Model

After eliminating 17 variables due to collinearity and lack of significance, the model
contained 26 variables. The equation for the general model, an elaboration of the
equation put forth in chapter two, is

$$Dt = (b_0 + b_1 X_1 + b_2 X_2 + b_3 X_3 + \ldots + \sum_{16}^{21} b_i X_i + \sum_{22}^{25} b_i X_k + b_{26} X_{26}) + E$$

Where Dt signifies dictator tenure length,

b_0 indicates a constant term

X_1 signifies a dummy variable for cases involving the U.S. as a sender,

X_2 measures the policy result,

X_3 measures the sanctions contribution to the policy result,

X_4 measures the level of international cooperation,

X_5 signifies a dummy variable for if an international organization was a sender,

X_6 measures sanction length,

X_7 indicates the prior relationship between the sender and the target,

X_8 signifies the prior political stability in the country,

X_9 measures the political stability during the sanction[56],

X_{10} measures the cost of the sanction to the target,

X_{11} signifies the political health and stability in the country,

X_{12} measures the GDP growth as a 5 year average,

X_{13} signifies a dummy variable indicating the tinpot dictator type,

X_{14} indicates a dummy variable for the tyrant dictator type,

X_{15} signifies a dummy variable for the timocrat dictator type,

X_i is a range of dummy variables indicating the ways dictators left power,

X_k indicates a range of dummy variables for the foreign policy goal of the sender,

X_{26} signifies a dummy variable indicating military action accompanying sanction,

E is an error term.

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[56] This is measured overall, including both the period of time involving dictatorship, and the before and after period, if relevant.

Table 4.1: The General Model

Variable	Coefficient	t- stat	p value
UScase	-3.682336	-0.97	0.333
policyresult	1.309304	0.88	0.380
sanctionscontribution	-3.26023	-1.30	0.197
internationalcooperation	5.771991	3.45***	0.001
intorgsender	-9.659748	-2.54**	0.013
Sanction_Length	0.531626	2.75***	0.007
priorrelationship	-2.983384	-1.34	0.185
priorpoliticalstability	-46.58669	-5.20***	0.000
politicalstabilityduring	9.274333	1.15	0.252
costtotargetpercentGNP	0.2011297	1.09	0.279
Healthandstabilityy	6.024286	2.37**	0.020
gdpgrowthpercent5yearaverage	0.2958231	1.03	0.307
_dictatortype3	-13.00293	-2.13**	0.037
_dictatortype4	-11.30677	-2.64***	0.010
_dictatortype5	3.66745	0.76	0.453
_wayofleavingpower2	4.629866	1.02	0.309
_wayofleavingpower3	-9.425876	-1.30	0.199
_wayofleavingpower4	8.516467	1.37	0.173
_wayofleavingpower6	10.42617	2.05**	0.044
_wayofleavingpower7	11.83704	2.01**	0.048
_wayofleavingpower8	15.20492	1.48	0.142
_foreignpolicygoal1	-8.32539	-1.46	0.149
_foreignpolicygoal2	-8.25418	-1.55	0.126
_foreignpolicygoal4	-5.294026	-0.92	0.362
_foreignpolicygoal5	-5.271498	-0.79	0.430
militaryaction	-7.467812	-2.07**	0.042
_constant	29.19635	2.44	0.017
F	9.96		
Prob > F	0.0000		
Adjusted R^2	0.6913		
Observations	105		

Source: Author's Calculations
*indicates 90% significance **indicates 95% significance ***indicates 99% significance

There were 10 variables of significance in the model. Interestingly, none of the purely economic variables prove significant to the model, while variables indicating the sanctions sender, and the situation in the country before the sanctions began, were much

greater determinants of dictator tenure length. Sanctions which were withdrawn without the dictator leaving power, or which have not yet ended both significantly lengthened the amount of time dictators were able to sustain power. Being a tyrant or a tinpot ruler significantly decreased the length of time a ruler could stay in power. Timocrats maintained power longer, though this figure was not significant. This is interesting, as it indicates that though there is an assumption that more repressive regimes are better able to sustain power, regimes that, while non-democratic, attempt to work on behalf of their citizens without repression were more likely to be able to maintain power.

According to this model, sanctions are most effectively used to shorten a dictators' tenure in previously unstable regions, with a low level of political health and stability when an international organization is the sender of the sanctions, rather than the United States. The variable indicating the presence of military action was also positive and significant, indicating the military action also speeds the end of a regime. Interestingly the longer a sanction is in place, the longer a dictator's tenure will be, indicating that there are many instances in the data of longstanding sanctions against dictators who have been not fazed by the action. This model demonstrates that prior political instability, rather than a sanctions economic impact, better indicates the length of time a dictator remains in power.

<div align="center">The "Pared Down" Model</div>

Interestingly, when all except 6 variables have been excluded, with the equation for the model being

$$Dt = (b_0 + b_1 X_1 + b_2 X_2 + b_3 X_3 + \sum_4^6 b_i X_i) + E$$

Where Dt signifies dictator tenure length,
b_0 indicates a constant term,

X_1 indicates the prior relationship between the sender and the target,
X_2 measures the prior political stability in the country,
X_3 measures the political health and stability,
X_i is a range of dummy variables indicating dictator type,
E is an error term.

all of the variables are significant to 99 percent, except for the dummy variable indicating

the timocrat dictator type. The adjusted R^2 suggests that over 50 percent of the variance

in dictator tenure length can be explained through just these 6 variables. The model

indicates both tinpots and tyrants experience much shorter dictator periods in power, and

that prior instability in the country begets higher insecurity for a dictator. Again, the

relationship between the sender and target countries proves significant to tenure length as

well.

Table 4.2: The "Pared Down" Model

Variable	Coefficient	t-stat	p value
priorrelationship	-7.363896	-3.55***	0.001
priorpoliticalstability	-27.70479	-3.50***	0.001
Healthandstability	6.676381	3.11***	0.002
_dictatortype3	-25.92572	-4.93***	0.000
_dictatortype4	-21.74003	-5.63***	0.000
_dictatortype5	-4.965557	-0.96	0.338
_cons	49.93184	7.02	0
F	23.57		
Prob>F	0.0000		
Adjusted R^2	0.5344		
Observations	119		

Source: Author's Calculations
*indicates 90% significance **indicates 95% significance ***indicates 99% significance

Meet the Tyrants

After eliminating variables for co-linearity and insignificance the model for

tyrants stands somewhere between the general and the pared down model. The model's

equation is

$$Dt = (b_0 + b_1 X_1 + b_2 X_2 + b_3 X_3 + \ldots + \sum_{4}^{9} b_i X_i + \sum_{10}^{13} b_i X_k + b_{14} X_{14}) + E$$

Where Dt signifies dictator tenure length,

b_0 indicates a constant term

X_1 signifies the policy result,

X_2 measures sanction length,

X_3 measures the prior political stability in the country,

X_i is a range of dummy variables indicating the ways dictators left power,

X_k indicates a range of dummy variables for the foreign policy goal of the sender,

X_{14} signifies a dummy variable indicating military action accompanying sanction,

E is an error term.

Table 4.3: The Tyrant Model

Variable	Coefficient	t-stat	p value
policyresult	4.233697	3.05***	0.004
Sanction_Length	0.6096283	2.35**	0.024
priorpoliticalstability	-55.15617	-5.15***	0.000
_wayofleavingpower2	-5.242824	-1.29	0.207
_wayofleavingpower3	-5.115672	-0.89	0.378
_wayofleavingpower4	4.565079	0.83	0.413
_wayofleavingpower6	12.15183	2.81***	0.008
_wayofleavingpower7	15.18305	2.39**	0.022
_wayofleavingpower8	5.093457	0.72	0.474
_foreignpolicygoal2	6.635306	1.7*	0.098
_foreignpolicygoal3	11.73712	1.12	0.271
_foreignpolicygoal4	7.046914	1.38	0.176
_foreignpolicygoal5	12.11704	2.34**	0.025
militaryaction	-5.890253	-1.85*	0.073
_cons	3.480987	0.53	0.601
F	6.16		
Prob>F	0.0000		
Adjusted R^2	0.5862		
Observations	52		

Source: Author's Calculations

*indicates 90% significance **indicates 95% significance ***indicates 99% significance

Unlike the general model, the policy result achieved by the sender country is significant to amount of time the dictator maintains power. The length of the sanctions again significantly lengthens the dictator tenure, a counterintuitive finding the implications of which will be discussed in the next chapter, as it perhaps fits with the

significance of sanctions being withdrawn without regime change, or being maintained

until the present, as lengthening dictator tenure as well. Military action proves significant

to shortening tyrants' tenure in this model as well. It should be noted that the F value of

6.06 is lower than desirable and should be taken into account when attempting to draw

conclusions from this model.

<div align="center">The Totalitarians</div>

As the table below reflects, there are 8 significant variables in the model

examining totalitarians tenure length. The equation for the model is

$$Dt = (b_0 + b_1 X_1 + b_2 X_2 + b_3 X_3 + \ldots + \sum_9^{11} b_i X_i + \sum_{12}^{15} b_i X_k + b_{16} X_{16}) + E$$

Where Dt signifies dictator tenure length,
b_0 indicates a constant term
 X_1 signifies a dummy variable for cases involving the U.S. as a sender,
X_2 measures the policy result,
X_3 measures the level of international cooperation,
X_4 signifies a dummy variable for if an international organization was a sender,
X_5 measures sanction length,
X_6 measures the prior political stability in the country,
X_7 measure the cost of the sanction to the target,
X_8 measures the GDP growth as a 5 year average,
X_i is a range of dummy variables indicating the ways dictators left power,
X_k indicates a range of dummy variables for the foreign policy goal of the sender,
X_{16} signifies a dummy variable indicating military action accompanying sanction,
E is an error term.

So in the totalitarian model, the financial costs of sanctions actually are

significant to dictators' tenure length. Like the general model, whether the U.S. sends the

sanctions affects dictator tenure length very little, while the political situation in the

country prior to sanctions is the largest determinant to be found.

Perhaps making this the most interesting model of the study, the adjusted R^2 value

suggests that over 93 percent of the variance in dictators' tenure length is being explained

by the model, higher than in any of the other models created.

Table 4.4: The Totalitarian Model

Variable	Coefficient	t-stat	p value
UScase	-2.507256	-0.50	0.628
policyresult	-9.012599	-6.87***	0.000
internationalcooperation	-4.380726	-2.28*	0.052
intorgsender	-7.609521	-1.53	0.165
Sanction_Length	0.8476779	4.61***	0.002
priorpoliticalstability	-113.4297	-12.6***	0.000
costtotargetpercentGNP	-2.984117	-3.00**	0.017
gdpgrowthpercent5yearaverage	-0.5139772	-0.68	0.515
_wayofleavingpower4	-26.8779	-2.71**	0.027
_wayofleavingpower6	-0.0935265	-0.02	0.988
_wayofleavingpower7	-5.924722	-1.23	0.253
_foreignpolicygoal2	-18.13726	-4.78***	0.001
_foreignpolicygoal3	-5.407754	-1.10	0.304
_foreignpolicygoal4	-10.47549	-2.52**	0.036
_foreignpolicygoal5	-12.28948	-1.77	0.114
militaryaction	2.282398	0.64	0.542
_cons	97.62794	7.86	0.000
F	27.30		
Prob>F	0.0000		
Adjusted R^2	0.9461		
Observations	25		

Source: Author's Calculations
*indicates 90% significance **indicates 95% significance ***indicates 99% significance

The Compatibility Model

The previous two models were adjusted so that their variables match, meaning

variables were taken out which could have been left in one model because they were

collinear in the other. By doing so the totalitarian and tyrant models could be compared

directly. The final equation for this model

$$Dt = (b_0 + b_1 X_1 + b_2 X_2 + b_3 X_3 + \ldots + \sum_8^{11} b_i X_i + b_{12} X_{12}) + E$$

Where Dt signifies dictator tenure length,
   b_0 indicates a constant term
   X_1 signifies a dummy variable for cases involving the U.S. as a sender,
   X_2 measures the policy result,
   X_3 measures the level of international cooperation,

X₄ signifies a dummy variable for if an international organization was a sender,
X₅ measures sanction length,
X₆ measures the prior political stability in the country,
X₇ measure the cost of the sanction to the target,
Xₖ indicates a range of dummy variables for the foreign policy goal of the sender,
X₁₂ signifies a dummy variable indicating military action accompanying sanction,
E is an error term.

Totalitarians vs. Tyrants

The Totalitarian compatibility model contained only 4 variables of significance to

90 percent or higher. Again the political stability in a country prior to the imposition of

sanctions proved significant to the length of time dictators remained in power.

Interestingly, while almost no other models had significance among the economic

variables, this model did show the cost of the sanctions to the target being significant and

negatively correlated with dictators ability to maintain power. However, it should be

noted that the F value for this model is quite low, and the adjusted R^2 indicates that much

of totalitarians ability to maintain power is not being explained through this model.

Table 4.5: The Totalitarian Compatibility Model

Variable	Coefficient	t-stat	p value
UScase	-0.5889466	-0.07	0.948
policyresult	-6.784069	-2.00*	0.060
Internationalcooperation	-4.09972	-0.87	0.397
intorgsender	0.6808918	0.06	0.950
Sanction_Length	0.383844	1.47	0.159
priorpoliticalstability	-32.43837	-2.23**	0.038
costtotargetpercentGNP	-4.094898	-2.13**	0.046
_foreignpolicygoal2	-11.37778	-1.14	0.269
_foreignpolicygoal3	3.003659	0.25	0.804
_foreignpolicygoal4	5.789532	0.57	0.578
_foreignpolicygoal5	11.94632	0.76	0.454
militaryaction	-1.822156	-0.22	0.830
_cons	80.066	5.02	0
F	2.37		
Prob>F	0.0446		
Adjusted R^2	0.3472		
Observations	32		

Source: Author's Calculations
*indicates 90% significance **indicates 95% significance ***indicates 99% significance

The Tyrant Compatibility Model

The same model, looking only at the examples of sanctions on tyrants, has only 3 significant variables to 90 percent or more. Prior political stability has proven significant in many previous models and continues to in this model. In the totalitarian compatibility model, the cost of the sanctions shortened dictator power longevity to a significant degree, while in this model the sanctions length, rather than the cost of the sanctions proved significant. In this model, unlike the totalitarian model, the involvement of military action was significant as well.

Table 4.6: The Tyrant Compatibility Model

Variable	Coefficient	t-stat	p value
Uscase	-4.894898	-1.05	0.299
policyresult	1.882174	1.16	0.251
internationalcooperation	3.136643	1.56	0.128
intorgsender	-4.755635	-1.05	0.298
Sanction_Length	0.6546655	2.41**	0.021
priorpoliticalstability	-52.32626	-4.67***	0.000
costtotargetpercentGNP	0.530515	0.30	0.764
_foreignpolicygoal2	1.487592	0.31	0.757
_foreignpolicygoal3	14.2549	1.17	0.250
_foreignpolicygoal4	6.142187	0.91	0.366
_foreignpolicygoal5	5.122951	0.77	0.445
militaryaction	-8.971974	-1.96*	0.057
_cons	15.60244	1.92	0.063
F	3.30		
Prob>F	0.0024		
Adjusted R^2	0.3559		
Observations	51		

Source: Author's Calculations

*indicates 90% significance **indicates 95% significance ***indicates 99% significance

It should be observed that both models have very low F values and rather low adjusted R^2 values, thus obviously very little is being explained by these models, and with very little surety. However, within this comparable context, military interventions affect tyrants and not totalitarians, policy results and the costs are significant to totalitarians and not tyrants, and the prior political stability and sanction length are significant to both groups. Only sanction length has the same significance.

This chapter analyzes several models, both general and specific to dictator type, to examine which indicators are significant to the length of time dictators stay in power. The next chapter will draw conclusions from this analysis with recommendations for possible changes in how economic sanctions might better shorten the length that dictators

stay in power, better target sanctions towards dictators, and suggest further avenues for continued research.

CHAPTER V

CONCLUSIONS

This chapter will draw preliminary conclusions from the models included in the study, examine shortcomings in the study, suggest potential areas for further research, and express final thoughts.

Preliminary Conclusions

The most interesting finding of this study was the lack of effect which the economic impact of sanctions has in affecting dictator's ability to maintain power when compared with impact political variables have in disrupting dictatorial rule. Prior political instability (rather than economic growth, inflation, or the economic cost of the sanctions on the target) shortened, with the most significance, dictator tenure length. Additionally, the study shows that in many instances, relationships matter. For countries that wish to be effective sanctioners, an isolationist foreign policy is no option. The United States, more than any other country, has sanctioned unilaterally. Interestingly, while the imposition of sanctions by an international organization significantly shortens dictator rule length in many models, the United States imposing sanctions was not significant in any model at shortening dictatorial rule.

When models including one type of dictator are compared independently, tyrants appear more susceptible to military action shortening their tenure, while totalitarian regimes appear more susceptible to economic influences. Although this study attempted to construct models to compare directly between dictator types, there were simply too

few instances for tinpots or timocrats to be included. The relative variances of the data through low F values and the lack of explanatory value in the model expressed through a low adjusted R-squared values allows for no strong conclusions to be reachable from these models.

Limitations

A key limitation to the study is the somewhat simplified way in which destabilizing dictators is considered as an entirely positive outcome. While dictators leaving power is of course a goal of sanctions, other aspects, such as what form of governance (whether democracy, an anarchic failed state, or another dictatorship) replaces the sanctions is vitally important to understanding sanctions impact and could add another level of complexity which the current study does not attempt.

Further Areas of Study

In a recent study Marinov (2008) found a decrease in coup d' etat since the end of the Cold War, hypothesizing that the expected prize of seizing power has been lowered due to an "electoral norm", or expectation that coup-entrepreneurs hold prompt elections. Examining how the imposition of sanctions within a country prior to a coup affects first the probability of a coup taking place, and second, the likelihood of that coup leading to prompt elections, is an area of study which could redefine how coups in the modern era are understood. While not the norm, there are enough examples from the data of persons seizing power and promptly holding elections, or ruling as a dictator for some time and then being popularly elected, that the conception of coups and dictators must continually be nuanced by context and circumstance.

Final Thoughts

Since this study was undertaken, Bashar al-Assad has intensified violence against his citizens and brought the country of Syria to the brink of civil war, with international sanctions and calls for his departure appearing ineffectual. During the same period, Mohamed Nasheed, the first democratically elected leader of the archipelago nation of the Maldives, was forced from power by a military junta. On some level, including the viewpoint commonly expressed in American media, these events can be seen as simply another example of a rise of authoritarianism with the overthrow of democratically elected leaders. However, part of the justification for Nasheed's ousting was his arrest of a Supreme Court Judge he claimed was corrupt. The Junta, however, argues that to maintain the integrity of the government and uphold constitutional imperatives, and to not allow this overstep of executive power, they were forced to coup. This recent event is used to outline a larger theme realized in the process of this study. While early on in the study an appreciation was gained that not all dictators were alike, and using Wintrobe's model a differentiation among dictators was made, in continuing the process, an understanding that not all types of dictators, or individual countries responses to them, are monolithic. While overwhelmingly most dictators who take power act as continuous stories of greed, opportunism, and violence for power, examples of dictators being fairly elected years after taking power or dictators who coup only to quickly re-instill democratic principles debunk the notion of the dictator as the decades long repressive ruler. Stronger analysis of justification, and strong international pressure must be applied quickly to attempt transitions towards democratic rule, but not at the expense of the local population, which heavy handed economic sanctions hurt the worst. Sanctions should be applied more sparingly, as their overuse de-legitimizes their effect, particularly by the

U.S. Sanctions do have the potential to effect change, but not for the reasons oft assumed, and sparing economic hardship on a population, while still pressuring its administration, could provide possibilities for more impactful sanction policies against autocratic regimes

Appendix A

Note: In a situation where power is transferred from one dictator to another as part of the same regime (communist Russia), this counts as continuity till the regime falls steps down.

18-2 Bolsheviks were at that point a weak (tinpot)state.

33-1 Nature of state had no bearing on the sanctions themselves

35 -1 the name totalitarian comes from Mousilini's Italy. While he did have public support (like a timocrat) there was high state control.

44-1 Peron, while repressive, was elected and had widespread support in 1946 and had widespread support of people.

48-2 the Nizam was a weak state sovereign.

48-4 Tito was popularly elected in 1945, and was popular as a World War II hero. Only later did he turn repressive.

56-2 Nasser, while coming into power due to a coup and staying in power, enacted large modernization programs and liberalization to the benefit of the population, and was widely beloved.

56-4 While Phoumi, Lao and Le were all non-elected leaders during this time, and were arguable all tinpots due to the weak nature of their state, the rapid rollover (capture, coup, recapture) makes tracking their tenure to the sanction time period impractical

57 -1 Any country which has a monarch with no power and has a democratically elected acting government (Netherlands has a Queen but with no actual power) is not included as a dictatorship.

57-2 Available data suggests that Bourguiba was continuously and fairly elected.

60-1 Trujillo leaving government officially while still holding power is not considered ceding power.

61-2 The case of Enver Hoxha is complex. While dictatorial in that he was not elected, and repressive (tyrannical) in forcing thousands into forced labor camps, the regime also notably improved women's rights, health care, as well as industrialization, all in a very timocrat manner. His cult of personality also enforces the tyrant idea. However, the great enforcement of his policies as a communist state and changes to the country in this top down manner overall make the Hoxha regime totalitarian in nature.

62-2 South Africa as a racial dictatorship best fits as a tyranny; violently repressive but not attempting to control to same degree as totalitarian regimes. While Apartheid policies started well before 1948, this year marked the rise of the nationalist party and the greater instilment of the Apartheid system.

63 -3 While Sukarno had a lot of popular support in getting into power, he consolidated that power, and took on tyrannical measures against political dissidents, etc.

63-5 The Estado Novo regime of Salazar and (after he fell ill) continued by Marcel Caetano until the carnation revolution of 1974. Not as repressive as some tyrants but still repressed political opponents, his PIDE repressed civil liberties. Also the murder of Humberto Delgado, winner of 1958 presidential election, supports this view.

65-2 While Indira Gandhi was arguable oppressive, she was only in office when elected, and left office when not.

65-3 Ian Smith, while elected, it was only by the white majority. Similarly to South Africa, this was a racial dictatorship which most closely resembles tyranny.

67-1 A civil war, not considered a dictatorship despite repression.

68-1 The Belaunde government had not been overthrown in the early part of 1968 at the imposition of sanctions.

68-2 The Belaunde government had been overthrown by October by the regime of Juan Velasco Elvarado. Velasco, while attempted timocrat-like reforms for Peru (agrarian reform, bi-lingual schools), he also constrained the press and repressed political opponents to such an extent, while also not garnering public support, that he is best considered a tyrant.

70- Ironically, sanctions were imposed upon the elected Allende regime until it was disposed of by a coup.

73-2 While Park Chung-hee took power briefly in 1963, he was elected in 1963 and 1967. However, Park's authoritarian policies and repression after 1971 contribute to him being characterized as a dictator. His repression and curtailing of the political system contribute to him being a tyrant.

74-2 See 65-2

75-3 See 62-2

76-2 While Lee Teng-hui continued the policies of democratization started by Chiang Ching-kuo, he was not democratically elected until 1996, and until then was part of the repressive military regime which ruled for 4 decades.

76-3 While many dictators were a part of the countries of the Arab League, as the sanctions were not targeted at a specific country, they were excluded.

77-1 While there were elections in Paraguay, it was a one party state and Stroessner was the only person on the ballot. His repressive policies and military rule discern him as a tyrant.

77-2 While Garcia was repressive, particularly against the Kekchi Indians, his overthrow in 4 years marks him more strongly as a tinpot.

77-5 While Somoza was elected in 1974, he did so after strong oppression, and largely used loaned money to enrich himself, a key characteristic of a tinpot. Wintrobe also specifically cites Somoza as an example of a tinpot. While Somoza did technically resign his presidency in 1979, he did so as an act of fleeing the Sandinistas, thus it is treated as a coup.

77-7 The case of the military regime of Brazil is perhaps one of the most complicated. While definitely dictatorial, with the military controlling the government between 1964-1985, the early regime was much more repressive than post 1974 with the appointment of Geisel. Both Geisel and Figueiredo after him worked to open the country to democracy, most notably by ending the government's censorship tool, the Fifth Institutional Act. Geisel was in office during huge economic growth and was popular for it, while Figueiredo was in office during weak economic growth, which didn't help popularity. Overall however, the regime was not weak or corrupt like that of a tinpot, was not tyrannical (post '74) like that of the tyrant, and did work towards democratic reforms, thus making it overall a timocracy, though at times an unpopular one. It would seem by the case study that the human rights record which the sanctions were trying to work against had already greatly eased by the time sanctions were imposed.

77-8 Mengistu's Red Terror period, which later got him convicted in abstentia of genocide, signifies the tyrannical nature of his regime.

78-1 See 61-2. The Regime is counting as having ended with the elections of 1991, rather than with the death of Hoxha as he appointed his successor, Alia.

78-6 While Nasser, Sadat, and Mubarak were all very different rulers, they were all part of the same line of succession, and are thus treated as one regime. However, they are treated as different types of dictators. While Sadat was never elected, he was largely lauded due to Egypt's

success in the 6 day war. However, the later Bread Riots and his peace treaty with Israel made him extremely unpopular, and to keep power he was forced to repress press and arrest Islamists, a tyrannical act. However, his overall economic liberalization attempts, and when not attempting to maintain power, with limited corruption (though arguable) seems to be working in the best interest of the country, making him a tyrannical timocrat, but a timocrat nonetheless.

78-7 With the rise in North Vietnamese communist government in 1954, continuity in government has consisted, even through the re-unification in 1976. However, the type of regime must be reconsidered following the opening up of the economy in 1986.

78-8 While Gadhafi and the Egyptian government claimed that Gadhafi stepped aside in 1977 and took on a merely symbolic role, the insistence on his ousting in 2011 supports the idea that at least for most Libyans, as well as the rest of the world, Gadhafi was in power until his ousting. His widely documented penchant for the grandiose, strong power, and use of state funds for personal enrichment all support him as a tyrant. His easing of repression by eliminating the harsh Revolutionary Committees is noted, but his repression of the Berber people support his tyrannical nature.

79-1 While Khomeini legitimized his power through a referendum, the non-renewal of this, de-legitimizes the regime. While totalitarianism is perhaps not a perfect understanding of a complex regime, the widespread social changes imposed, the strength of the regime, and its survival past the life of Khomeini instills it as a totalitarian regime rather than tyrannical.

79-2 While Zia held elections in 1984, these were not open and widely considered illegitimate, as only 10% of electrate voted. As the sanctions stayed in place after Zias death into the dictatorship of Pervez Musharraf this was taken into account as well. While Musharraf legitimized his coup through elections in 2002, his later tyrannical state of emergency rule was considered to de-legitimize him.

79-4 Busch held power briefly, as a tyrant with a state of siege in 1979, but stepped down. The military under Tejada and later others, take power from 1980 until stepping down in 1982. Both were tyrannical regimes.

80-2 While dictatorship had ruled Iraq since 1958, the nature of the regime was quite different than that of Saddam Hussein, and is thus separated.

81-1 Wintrobe cites the Sandanistas "in their salad days" as timocrats, improving social services, health, etc. While they did institute a state of emergency due to the contra conflict in 1982, they were elected in 1984 in what the UN credited as fair elections.

82-3 Jonathan, both in being appointed to power and then not handing over power after the 1970 elections, is a dictator. While he did institute a state of emergency, this only affected a few leaders. As a weak leader, he is best characterized as a tinpot.

83-3 While Mugabe was elected in 1980, and thus arguably not a dictator at the time, the election in 1980 experienced intimidation and by 1982 mass violence and suppression had begun, thus the era of Mugabe the tyrant started before 1983. While Mugabe could be argued to be a tinpot, his longevity in office and violent repression are more characteristic of a tyrant.

83-5 While Ceausescu in his later years created a cult of personality which marked the traditional characteristics of a tyrant, including taking on the name "Genius of the Carpathians", the overall communist structure of the regime marks it as a totalitarian regime. Additionally, while normally a shift in leadership in a military or communist regime is not indicated as a change in leadership, in the case of Ceausescu, due to the personal nature of his rule, it is differentiated.

84-1 See 79-1

85-1 While Nelson Mandela was not elected until 1994, ending the Apartheid system, the transition to democracy began much earlier. The end of the regime is marked as 1993, when

Mandela, speaking before the UN, asked that sanctions be lifted as part of the transition to democracy. Prior to this Mandela had urged countries to keep sanctions, some such as the US and Britian, didn't while others did. Thus sanctions lifted before 1993, while possibly doing so due to De Klerk's movement towards ending Apartheid, are still counted as being withdrawn during the Apartheid regime.

86-1 The Father and Son Assad regime are considered a continuity, but are considered separately as types of dictators.

86-2 There is some question as to how democratic the elections in Angola were in 1992, yet Dos Santos was elected. However, for future Angolan sanctions it would be noticed that Dos Santos has become a dictator again by postponing elections over the last decade. However, as of 1992, he had temporarily legitimized his regime.

86-3 While Kenan Evren was technically elected in 1983, the banning of pre-coup political leaders and heavy repression, the continuation of Evren's rule afterward is viewed as a continuation of dictatorship. Additionally, the 2012 indictment of Evren for his actions in the coup supports this theory. Thus Evren's retirement and the elections of 1989 are considered the end of the Evren rule.

87-1 Noriega is the considered by Wintrobe a prime example of a tinpot.

87-2 The military regime after Duvalier was a weak state, which was replaced with the resignation of Avril and the free election of Aristide in 1990. While Avril technically quit, the essential fleeing nature with which he left power is counted as being forced from power.

87-3 While Duarte did seize power in a coup in 1979, he was democratically elected in 1984.

87-4 While during the interim of the Rabuka regime and the Speight inspired loss of democracy there were arguably not free elections as the constitution supported ethnic Fijian rule, this was not considered a dictatorship.

88-2 Barre's 'scientific socialism' was definitively totalitarian in nature. While there was no democracy after Barre's fall, there was clearly no democracy. However, there were over 26 competing warlords all fighting within the country, thus marking the tenure of each of these would be impossible so they are excluded from the data set.

89-1 Bihendra was a weak leader, with no strong hand and no mass changes to the society. While he stayed king until 2001, in 1990 he allowed multiple political parties in 1990, thus stepping down and becoming a constitutional monarch.

90-1 See 80-2.

90-3 While Moi's election in 1992 was considered unfair in some circles, they were largely considered a move towards a democratic system and result in the renewal of aid. While Moi additionally could have been considered a weak dictator on taking power on 1978, or even as a timocrat due to his large acceptance, by 1990 Moi definitively could be considered a tyrant due to widespread repression and lack of democratic reforms until his election in 1992.

90-4 Mobutu's kleptocratic nature and penchant for a grand style, with widespread repression creates an almost definitional tyrant. While there was support (often bought), characteristic of a timocrat, the fact that opposition was opposed in his one man state instills his tyrannical status.

90-6 While Selah could be called a dictator due to the decades he maintained power, the fact that he was re-elected better characterizes his situation as a dominant party state.

91-1 While there was tyranny enacted during the Bosnian civil war, due to its nature as a civil war and the competing actions and interests and lack of a dictatorial power base, they are counted as not being a dictatorship.

91-3 Suchinda Kraprayoon's appointment by royal command after leading the 1991, later leading of Black May, characterizes him as a tyrant.

91-4 While Suharto tried to continue his regime with Habibi, Habibi's stepping down from power and lessening of repression is considered a transitional government rather than a continuation of a dictatorship.

91-6 In attempting to turn the country back towards totalitarianism, the military coup of 1991 tried to oust the Gorbechev and Yeltsin regime which was turning towards democracy, but were still considered a dictatorship until later in 1991 with the disintegration of the USSR. Thus the Western powers were protesting the coup of weak tinpots hoping to bring back totalitarians against soon to be reforming totalitarians.

91-7 While Berdimuhanedow succeeded Niyazov and was also a dictator, the very unique cult of personality and repression of the Niyazov regime forces it to be considered separately.

91-8 Fujimori is possibly the most hard to discern cases to be considered. Elected and widely popular, however, leading an *autogulpe* (self coup) in 1992. He later is elected to a third term by creating a constitutional loophole. He acted largely on behalf of the populace and was received and re-elected, but oppressed many, particular the indigenous, by supporting sterilization programs. He was later accused of human rights abuses from fighting the Shining Path. Thus he was both timocrat and tyrant, and in many ways not a dictator at all. Due to the popularity of his autogulpe, and his re-election in 1995, he is considered a timocrat from the period of 1992-1995, and while he may have acted dictatorially later, this was while elected to office.

92-1 While Charles Taylor won Liberia's election in 1997, this was after becoming and military warlord in charge of large amounts of the country. It is also believed by some that many voted for him to end civil war. Additionally, after being elected he immediately started attempting violence against political opponents. While he technically resigned in 2003, this was only on the verge of international invasion, and is thus counted as a coup rather than stepping down.

92-2 Eyadema was re-elected several times, allowing that he could be considered a dominant party state leader. The sheer length of his tenure, suppression of dissidents, and cult of personality surrounding his rule allows him to be considered a tyrant.

92-4 While Obiang has amassed a personal fortune of over $600 million dollars, in true tinpot form, he does not oversee a weak government, rather one of the most oppressive regimes in Africa, and must thus be considered a tyrant.

92-6 While Biya has been elected several times, the legitimacy of these elections and the repression of opposition parties show the illegitimacy of the regime.

92-8 From 1992 to 1997, as there was a provisional government, it is not considered to be a dictatorship. From 1998, with the instilment of Hu Sen, who has since not left power, the case is considered a dictatorship.

93-2 Serrano is not considered a dictator for his full time in power, as he was elected in 1991, but rather only as a dictator from 1993 onwards, as this was when he attempted to dissolve congress, consolidate power, etc.

93-4 As Abacha was not elected banned political parties, etc, he is not considered a dictator. Abubakar, appointed after Abacha died, so quickly moved the country towards free and fair elections that he is not considered a dictator.

94-4 As many viewed the elections of 1996 as fraudulent and only accepted Jammeh's election after 2001, this is the date used as him going from being a dictator to an elected ruler.

96-2 Mainassara is a tyrant. Wanke, though he did come to power in a military coup, surrendered power very quickly and stepped down, ensuring democratic reforms.

96-4 Samper, while elected possibly with contributions from a drug cartel, was elected. Additional, while repressive, he was largely repressive against militant groups. Not found to be a dictator.

98-2 See 91-1

99-2 Gbagbo was able to take power through non-democratic means but was arguably elected. While he did not technically step down or become democratically elected, his opening to democratic process of rivals is included as equivalent.

00-1 While Mendoza's quick dissent from power could lead him to be labeled a tinpot, the fact that he did not try to enrich himself and enjoyed support from the indigenous community, speaking against corruption, makes him a short-staying timocrat.

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