Aid v. Sanctions for Taming Oppressors:
Theory and Case Study of the Iraqi Kurds

by

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Abstract: We model an oppressor aiming at victimising an excluded group in his country, with two main variants. A foreign power affects his behaviour using either conditional aid, subject to the dictator’s participation constraint, or the threat of sanctions, broadly defined, subject to the credibility constraint. The choice between the two is either determined by the latter, or by their relative cost. Aid is preferred when the threat of sanctions is ineffective, and sanctions are too expensive. Sanctions might be imposed, if the threat is ineffective. A case study of the Iraqi Kurds after Iraq was put under sanctions is presented.

Key Words: Aid - sanctions – threat – oppressor – credibility – Iraqi Kurds.

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1. INTRODUCTION

The events in Yugoslavia in the 1990s show how awkward it is to influence an oppressive government that victimises a minority group. While NATO first threatened, and then imposed, air strikes and other reprisals, Milosevic continued persecuting the ethnic Albanians in Kosovo, stepping up “ethnic cleansing” as a response to the bombs. Many oppressors can be so characterised as victimising some groups in their countries: Hitler persecuted the Jews and the Gypsies, Stalin the ‘Kulacks’ and the communist Nomenklatura, Khomeini the Jews and the Baha’is, Saddam Hussein the Shi’ites and the Kurds, Mengistu, the Oromos and other non-Amharic ethnic groups in Ethiopia, Obote the Baganda in Uganda, etc. In many countries, various groups identified by ethnic, religious, or economic criteria have been the targets of persecution. Sometimes, the government is not directly involved, but is turning a blind eye on the violence inflicted by activists on some designated groups. For example, in Zimbabwe in the early 2000s, the so-called ‘war-veterans’ were expropriating, and sometimes murdering, the white farmers and the emergent black middle class, especially among the N’debele, with impunity. In Chad, herdsmen from the ruling northern group are using the southerners’ cotton fields as grazing land, and often kill the farmer with impunity. In Afghanistan, the Talibans oppressed about half the population, namely the women. In South Africa under apartheid, the oppressed group was the vast majority of the population. Therefore, we call “excluded group” the potentially victimised group, capturing the lack of political influence that lies at the root of their problem.

While during the Cold War humanitarian-cum-military interventions by foreign powers were often inhibited by the fear of the other side’s reaction, the 1990s have witnessed an increasing number of such interventions aimed at refraining this type of oppressor. Part of the international community is now willing sometimes to exert pressure on the latter for the sake of the persecuted groups. Military interventions of this kind are fairly recent, and raise many issues regarding their efficacy. The international intervention against Iraq following its invasion of Kuwait in 1990 is an important case, as the economic and military sanctions imposed for the subsequent decade were partly aimed at protecting this country’s
oppressed ethnic or religious groups. Section 5 below analyses how the Iraqi Kurds fared during that period, and brings out the crucial contribution of the sanctions to the improvement in their well being. The theoretical model presented below gives a central role to this type of positive fallout. This case study does not discuss the events following the recent US-UK intervention, which are still too recent for a deep analysis.

However, foreign intervention aimed at affecting government behaviour has been present since World War II, as shown, e.g. by the economic sanctions against apartheid in South Africa. Levy (1999) presents a fairly sceptical assessment of their efficacy, while Elliott and Hufbauer (1999) discuss the expanding use of economic sanctions in the 1990s, and their limited success. Naylor (1999) documents how economic sanctions have lasting negative effects, by giving rise to smuggling and other criminal activities. The model presented below provides some clues about this apparent paradox that sanctions are more often imposed, while their lack of effectiveness is widely recognised. Jing et al. (2003) present a joint econometric analysis of the type of sanctions (military, trade, or financial) and of their success. They suggest that sanctions are more successful when the target is a small and unhealthy economy, but their analysis is limited by their inability to measure the relative cost of the different types of sanctions. However, one should not limit the analysis of foreign intervention to economic or military sanctions. Aid to developing countries has been increasingly delivered as program aid, conditional upon the recipient government undertaking various policy reforms. Political conditionality is a relatively new concept, and aid has been given in the past, and is still often given, to oppressors. Using cross-country regression analysis, Svensson (1999) shows that aid is more effective in affecting growth in more democratic countries, but is not allocated to the latter more favourably. However, Alesina and Dollar (2000) show that, in the time series dimension, democratisation is often followed by increased aid. Mobutu’s Zaire is an example of a non democratic country which received aid continuously, for cold war-related reasons. Many oppressive dictatorships in Africa and Asia have received aid. This has changed somewhat recently, and General Abacha’s Nigeria, for example, was denied any aid for political reasons, after killing some representatives of the Ogoni people. The question arises whether giving aid to such dictators
is legitimate, or whether the international community should use sanctions against ‘bad government’ and reserve aid to ‘good governments’. However, denying aid systematically to oppressive regimes would exclude from the list of potential recipients a large fraction of the developing world, and thus does not seem feasible.

The present paper analyses theoretically the relative merits of aid and sanctions, which are treated separately in the literature, for inducing oppressors to reduce their persecution activity. Frey (1984), Kaempfer and Lowenberg (1988), Eaton and Engers (1992, 1999) and Wintrobe (1998), among others, discuss sanctions, while Palda (1993) discusses aid as a way to influence a dictator. A huge literature is discussing other aspects of aid (e.g. World Bank, 1998, Adam and O’Connell, 1999, Svensson, 2000 and 2003, Azam and Laffont, 2003). We are not aware of any attempt at modelling the choice between the two. This is done here using a model where the oppressor’s welfare is affected by a negative externality from the well-being of the excluded group, while the foreign power feels, on the contrary, a positive externality in favour of this group. While the latter is a standard assumption in this literature, which assumes usually some donor’s altruism towards the non-ruling group, the former is less familiar. The examples given above suggest that it is a common phenomenon. It can also capture more roundabout effects, like, for example, the impact of excessive taxation on one group, whose proceeds benefit the ruler and his followers, and which the foreign power wants to redress. ‘Sanctions’ is understood here broadly, as a generic term for any type of expenditures by the foreign power that affects negatively both the sender and the target of the sanction. It encompasses both economic and military interventions. For many purposes, these two types of actions cannot be lumped together, as they involve different moral or political characteristics. However, they need not be distinguished within the theoretical framework used here. The focus is on the different roles of the credibility and effectiveness of the threat of sanctions, as well as their cost, in determining the choice between aid and sanctions. The outcome depends on the relative credibility of the commitment to use one or the other. For the sake of the argument, the balance is heavily tilted here in favour of aid, assumed fully credible, as in Azam and Laffont (2003), while sanctions are assumed to be self-enforcing. The threat of sanctions is made under a
credibility constraint requiring to look at the effect that they would have if they were actually imposed. These are the standard assumptions in each of these literatures. Svensson (2000 and 2003) discusses mechanisms making the threat of withdrawing aid in case of non compliance credible, while Eaton and Engers (1992, 1999) discuss the credibility of the threat of sanctions in a repeated game.

In the present model, the foreign power chooses between (i) threatening sanctions, (ii) imposing sanctions, and (iii) offering conditional aid. Solution (i) is the cheapest, involving no actual cost, but it may be ruled out by the credibility constraint. Then, solutions (ii) and (iii) may be the only options left. Aid and actual sanctions are then two possible substitutes for an incredible threat of sanctions. In this model, the marginal cost of imposing sanctions is increasing in their scale, and the foreign power cannot commit not to choose their cost-minimising level \textit{ex post}, which may fall short of that required for effectiveness. This self-enforcement constraint provides the foundations for the fact that an upper bound is limiting the size of the sanctions that can really be imposed, and hence be threatened credibly\textsuperscript{1}. They may be actually imposed in equilibrium, when threatening is ineffective, for some values of the parameters. Then, offering aid may be cost-minimising, when sanctions would otherwise be imposed. The scope of this paper is admittedly limited by its two-agent static setting. This precludes reputation effects, such that the foreign power might impose sanctions to dictator A, for impressing dictator B, or dictator A himself, at a later date. This type of issues is left for further research, while it is discussed by Eaton and Engers (1999) in a repeated game. It is more difficult to produce a one-shot model where sanctions are imposed, as done here, while this is relevant for a world where rulers do not live forever. The positive fallout mentioned above, and illustrated by the Iraqi case, plays a crucial role in bringing about this result.

The next section presents the basic model, discussing first the case of autarky. The oppressor’s decision to persecute is a function of various parameters, under the simplifying assumption that the target group does not fight back. The impact of aid is then discussed within a contract-theoretic set up, showing how aid can lead the dictator to reduce persecution. The threat of sanctions is then discussed, showing the minimum level of

\textsuperscript{1}For example, Saddam would probably not have been much impressed by a threat of a nuclear strike.
sanctions that must be threatened for inducing the oppressor to give up persecution. The range of parameter values for which such a threat is credible is also identified. This credibility constraint determines the choice between threatening to impose sanctions, without imposing them \textit{ex post}, on the one hand, and offering aid or actually imposing the sanctions, on the other hand. A crucial assumption at this stage is that the sanctions have some direct positive fallout for the victimised group, as mentioned above. It is relaxed in an extension presented afterwards. This type of positive fallout may involve humanitarian aid, which would not reach its target, were the dictator left free to divert it, as did for example the Derg regime in Ethiopia during the 1984 famine. Similarly, some aid reached the Iraqi Kurds after the sanctions were imposed, as shown below, which would never have reached them otherwise. The subsequent section discusses two extensions, looking first at the effects of the ‘moral cost’ of giving aid to a dictator, and then discussing the influence of income effects on persecution and the credibility of sanctions. The latter two exercises reduce somewhat the scope for aid as a substitute for an incredible threat of sanctions. When such income effects are present, the assumption that the sanctions have some direct positive fallout for the victimised group can be dropped, while the model still predicts that they may be imposed. Hence, two possible explanations are offered for the imposition of sanctions when the threat is ineffective: (i) there are some direct positive fallout for the excluded group, or (ii) there are income effects pushing the oppressor to reduce its detrimental activity, generating an indirect positive fallout. Testing between these two possible, and not exclusive, assumptions is beyond the scope of this paper. However, the case study of the Iraqi Kurds between the two wars against Saddam Hussein, presented below, suggests that assumption (i) is quite realistic. This ethnic group from northern Iraq, victimised for decades, has prospered strikingly since the sanctions on Iraq were imposed in early 1991. Among the fallout of the sanctions against Saddam’s regime, the Iraqi Kurds received directly some limited amount of aid, which could never have reached them without the allies’ military protection. This type of aid escapes the control of the ruling government, unlike the standard aid flow, and must be put to the credit of the military intervention. Many other positive
effects resulted from the intervention, unrelated to this aid flow. Section 5 provides some factual justification for the two explanations (i) and (ii) mentioned above.

2. THE BASIC MODEL

The model describes a very common type of oppressor, who aims at victimising a group of citizens of his country\(^2\). For the sake of simplicity, the model is linear in most of its components, with one exception. This allows to get at the core argument, without getting into any mathematical complication. Let \(n_M\) represent the number of persons in this excluded group, all assumed identical, and let \(n\) denote the number of members of the favoured group, also called the ruling group, and assumed as well to be all identical. Similarly, let \(c_M\) be the consumption level of the members of the excluded group, whose income is \(y_M\), and \(c\) be the consumption of the ruling group members, with income \(y\). The dictator can inflict a cost \(\gamma = y_M - c_M\) to each member of the excluded group, paid for by a lump-sum tax on each of the ruling group members worth \(n_M \delta \gamma / n\). In this expression, \(\delta\) represents the unit cost of inflicting the damage \(\gamma\). For the sake of simplicity, we regard both \(\delta\) and \(\gamma\) as exogenous in this section, while we discuss below the difference that it makes when \(\gamma\) is affected by the level of income.

**Persecution in autarky**

The oppressor is aiming at maximising the welfare of his favoured people, diminished by his disutility from the well-being of the excluded group. This provides the foundation for his propensity to victimise the latter. Let \(c\) be the utility derived by the oppressor from the consumption level of the ruling group, and \(\theta\) \(c_M\) be the disutility, from the dictator’s point of view, of the consumption of the members of the excluded group. We interpret \(\theta\) as an indicator of the oppressor’s harshness against the excluded group\(^4\). Denote

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\(^2\) See Findlay (1991) and Wintrobe (1998) for illuminating taxonomies of dictator’s types. However, the oppressor analysed here is of a different type.

\(^3\) Unless otherwise specified, all the parameters of this model are defined as positive.

\(^4\) Another interpretation of this parameter is possible, and is spelled out in footnote 5 below.
\( D \in \{0, \gamma\} \) the damage inflicted to each member of the latter group, where \( \gamma \) is a constant parameter. Then, the oppressor seeks to:

\[
\max U^D = nc - n_M \theta c_M,
\]

s.t. \( nc = ny - n_M \delta D \),

and \( n_M c_M = n_M[y - D] \)

For the sake of simplifying notation, normalise \( n = 1 \). Then, after substituting the constraints, the dictator’s utility function is:

\[
U^D = y - n_M \theta y_M + n_M(\theta - \delta)D.
\]

The oppressor can reduce the consumption of the excluded citizens at a cost \( \delta \) per unit to the favoured group members, and this brings him an increase in utility at a rate \( \theta \). He will thus carry out this persecution if \( \theta > \delta \), in autarky. This assumption is maintained throughout the rest of the paper. Then the dictator’s autarky level of utility is:

\[
U^{DA} = y - n_M \theta y_M + n_M(\theta - \delta)\gamma \tag{3}
\]

The example of South Africa under apartheid illustrates how this model may be interpreted. The excluded group was then obviously the black population, and in particular the black workers, who suffered exclusion and discrimination. The white workers, by contrast, were benefiting from higher wages because of the restricted competition by black workers. However, this was not a net benefit for the white population, as the firms were suffering from the resulting higher costs, and lower profits. Hence, apartheid was in fact taxing the firms, run by white entrepreneurs, for subsidising white workers at the expense of black workers (Wintrobe, 1998).

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\(^5\) Notice that this model could be interpreted in a less dramatic or political way, by looking at \( \gamma \) as some fiscal revenues, and at \( \delta \) as the cost of operating the tax system. Then, \( y_M \) must be interpreted as an irrelevant parameter. Hence, the present model could also be viewed as describing a foreign power aiming at obtaining a tax cut, say within a structural adjustment program, from the local government (see Adam and O’Connell, 1999). Then, \( \theta \) measures the propensity of the local government to control the economy and expand the tax burden, or the marginal utility that it gets from increasing tax revenues.
Now, we assume that a foreign power wants to invest resources for reducing the oppressor’s detrimental activity, and we analyse what determines the choice between aid and sanctions as a means to this end. In the real world, the institutions that control aid are different from the ones that control sanctions. For the sake of simplicity, we assume that a unique principal, the foreign power, makes that decision, as a stylised representation of the unique source of democratic control that bears ultimately on the two types of institutions. In the same vein, we define aid as conditional transfers made under the control of the recipient government, like ODA in the real world, so that aid and sanctions cannot be used simultaneously, but are instead two alternative ways of influencing the dictator. This does not preclude the use of other forms of aid, e.g. humanitarian aid, as a targeted complement to sanctions, that does not benefit the dictator in any way. This distinction has been already made above. As will become clear shortly, a major formal difference between aid and sanctions is that the former requires the recipient government to participate willingly (Palda, 1993), while the latter does not involve such a participation constraint. Another type of individual rationality constraint is then involved.

The role of aid

In order to capture simply the willingness of the foreign power to invest resources in enhancing the well-being of the excluded group, we assume that the former benefits from a positive externality from the latter, through a linear utility function. The foreign power offers the dictator a take-it-or-leave-it contract promising a given amount of aid in return for a given level of consumption reached by the excluded group. The foreign power thus offers an aid contract promising to give the dictator an amount $a$ if $D = 0$, and 0 if $D = \gamma$. We assume that the foreign power has access to a credible commitment technology, so that no credibility constraint needs to be imposed. This is a standard assumption in this type of principal-
agent problem, and we assume also that the consumption level reached by the excluded group is verifiable\(^9\). These are the standard assumptions in “complete contract” theory. Denoting \(Y\) as its income, \(\eta\) its coefficient of altruism, and \(a\) the level of aid, the foreign power’s utility function is:

\[
\max U^F = Y - a + n_M \eta c_M,
\]

(4)

The oppressor will reject the aid contract unless it gives him at least the same utility level as in autarky. Hence, his participation constraint is:

\[
y + a - n_M \theta y_M \geq y - n_M \theta y_M + n_M [\theta - \delta] Y
\]

(5)
or

\[
a \geq n_M [\theta - \delta] \gamma.
\]

(6)

As \(a\) enters \(U^F\) negatively, as seen from (4), the participation constraint (6) is binding in equilibrium, determining the level of aid required to discourage the dictator from inflicting \(\gamma\) on the excluded group. The amount of aid is thus increasing linearly with the size of the excluded group, as the foreign power must compensate the dictator for the disutility incurred by refraining from inflicting a loss \(\gamma\) to each member of the excluded group. It is also increasing in the dictator’s marginal disutility from doing this, i.e. \(\theta - \delta\), after taking due account of the cost of inflicting the damage. This is the ‘precium doloris’ paid by the foreign power for each unit of damage prevented. This analysis can be summarised as follows:

**Proposition 1:** When aid is used by the foreign power, its amount is \(a = n_M [\theta - \delta] \gamma\).

**Proof:** This optimal aid contract is determined by maximising (4) under the participation constraint (6). QED

\(^9\) As all the members of this group are assumed identical, the donor could check on their consumption level by means of a fairly cheap survey.
Let us now turn to the case of sanctions, in order to identify how they change the choices open to the dictator. The next section shows that under some conditions, the threat of sanctions is a preferred alternative to the use of aid for taming the oppressor.

3. THE TWO USES OF SANCTIONS

The foreign power can use sanctions, imposing a cost \( \beta \), chosen endogenously, on the ruling group or the oppressor. The former incurs in so doing a cost \( \sigma \beta^2 \). Assume in addition that these sanctions reduce the effectiveness of the persecution, reducing the damage inflicted to \( \max \{ \gamma - \rho \beta, 0 \} \). This captures the idea that the sanctions can only improve the fate of the excluded group to the extent that it is victimised. Sometimes, in the real world, sanctions also affect negatively the excluded group that they are meant to protect. This can be taken into account here by assuming \( \rho < 0 \). This case raises special problems for the threat of sanctions to be credible, as shown below. However, in many cases, foreign intervention initially imposes some cost on the victims, but improves their lot eventually, so that the present value of the impact is positive.

**Conditions for credibility and effectiveness**

Unlike in the analysis of aid, we assume that there exists no external mechanism making the commitment by the foreign power to inflict sanctions fully credible. These two polar assumptions probably overstate the credibility differential between aid and the threat of sanctions in the real world. However, this captures in a tractable way that sanctions are quite exceptional, while aid is a common type of intervention. Hence, the institutions for making the latter credible are more likely to be in place than the ones dealing with the former. Often, some uncertainty remains until the last minute regarding the imposition of sanctions, as illustrated by the delayed intervention in Bosnia in the 1990s. Therefore, we assume that the threat of sanctions is credible only if it is in the interest of the foreign power to impose them *ex post* as a response to the persecutions being inflicted by the dictator. A self-enforcement constraint of this kind is also used by Eaton and Enders (1992, 1999).

When the dictator chooses \( D = \gamma \), the foreign power imposes the sanctions if:
\[ Y - \sigma \beta^2 + n_M \eta (y_M - (\gamma - \rho \beta)) \geq Y + n_M \eta (y_M - \gamma), \quad (7) \]

and \( \beta \leq \gamma / \rho \), or if:

\[ Y - \sigma \beta^2 + n_M \eta y_M \geq Y + n_M \eta (y_M - \gamma), \quad (8) \]

otherwise.

Define:

\[ \pi_s = \max_\beta n_M \eta \min \{ \rho \beta, \gamma \} - \sigma \beta^2, \quad (9) \]

as the profit from sanctions. This allows to write condition (7) as in proposition 2.

**Proposition 2:** If \( \rho \geq 0 \), the only credible threat of sanctions is to impose:

\[ \beta^* = \min \left\{ \frac{n_M \eta \rho}{2\sigma}, \frac{\gamma}{\rho} \right\}. \quad (10) \]

**Proof:** \( \beta^* \) maximises (9), and \( \pi_s \geq 0 \) for either of these values. It is thus the optimal level of sanctions that the foreign power wants to inflict, *ex post*, if challenged to do so, and the credibility constraint holds. QED

In this case, if challenged to do so, the foreign power imposes the profit-maximising level of sanctions, subject to \( \beta \leq \gamma / \rho \), because of the assumption made above that the sanctions cannot reduce the damage inflicted below zero. Notice that, in this model, the foreign power never imposes the sanctions if the dictator is not implementing the persecution, as his profit would then be negative.

We thus find that, in this case, no threat of sanctions is ever credible if the latter do not reduce the detrimental effect of the persecution, as (10) requires a positive value of \( \rho \). The intuition is that the benefit of imposing sanctions as a response to the oppressor’s implementing persecutions cannot come from their deterrent effect on the latter\(^{10}\). It has to

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\(^{10}\) This statement would need to be qualified in a model where the foreign power was facing several dictators in different countries, where the sanctions imposed upon one dictator might deter other dictators, or in a dynamic model, where the sanctions imposed to day might affect the choice of the dictator to morrow (see Eaton and Engers, 1999).
come from their effectiveness at helping the excluded group\textsuperscript{11}. If the latter is weak, then the threat of sanctions lacks credibility. An extension presented below shows how the condition on $\rho$ derived from (10) is less restrictive when an income effect affects the choice of $\gamma$ by the dictator, making the threat credible even if $\rho = 0$. Notice that (10) implies that the threatened level of sanctions is larger, the larger the size of the excluded group, and the larger the foreign power’s coefficient of altruism.

Now, under the credibility constraint just established, the only credible contract between the foreign power and the oppressor is: “I will choose $\beta = 0$ if you choose $D = 0$, and I will impose $\beta = \beta^* > 0$ if $D = \gamma$”. However, this level of sanctions is not necessarily enough for deterring the oppressor from implementing the persecution.

The size of the sanctions $\beta^*$ required for them to be effective in changing the dictator’s behaviour can now be determined. The latter chooses $D = 0$ rather than $D = \gamma$ if the utility reached without persecution nor sanctions is higher than that reached while inflicting damage to the excluded group, under sanctions. Hence, the dictator refrains from persecuting if:

$$y - \theta n_M y_M \geq y - \theta n_M y_M + n_M [\theta - \delta] \gamma - [1 + \theta n_M \rho] \beta^*.$$  \hfill (11)

This puts a lower bound on the value of sanctions that can be threatened effectively, expressed in the following proposition.

**Proposition 3:** The threat of sanctions will only be effective if:

$$\beta^* \geq \frac{n_M [\theta - \delta] \gamma}{1 + \theta n_M \rho}.$$  \hfill (12)

Otherwise, $D = \gamma$.

**Proof:** Given the threat of sanctions, the oppressor’s profit function is:

$$v_p = n_M [\theta - \delta] \gamma - [1 + \theta n_M \rho] \beta^*.$$  \hfill (13)

\textsuperscript{11}Hence, for example, the credibility of the threat of a military intervention is enhanced if the latter can be supplemented by humanitarian actions in favour of the excluded group. The case of the Iraqi Kurds presented below illustrates how these two types of interventions are complementary.
Condition (12) is easily derived from (13) by requiring that $v_p \leq 0$. QED

Condition (12) shows that the level of sanctions required for deterring persecution by the dictator is larger, the larger is the size of the excluded group, and the larger is the harshness coefficient $\theta$. It is lower, the more efficacious are the sanctions for reducing the harm done. Notice that the minimum level of sanctions specified by (12) is lower than the level of aid found at proposition 1. This reflects the assumed favourable impact of the sanctions on the harm done by the oppressor. A noticeable difference between the sanction analysis performed here and the aid problem of the previous section, is that no participation constraint needs to be taken into account. The country cannot escape from the impact of the sanctions like it can reject the aid offer. However, condition (11) may be regarded as a ‘non-participation’ constraint, specifying under what conditions the dictator refrains from implementing the persecution. It is just another type of individual rationality constraint.

**The choice between aid and the threat of sanctions**

Clearly, for convincing the dictator not to inflict any damage on the excluded group, the foreign power prefers to use the threat of sanctions, which does not cost anything when it is both credible and effective, rather than aid, which is costly. However, this does not work when the threat of sanctions is ineffective, because of the credibility constraint. Then, combining propositions 2 and 3 yields the following:

**Proposition 4:** The foreign power chooses the threat of sanctions, knowing that they will not be imposed, if either:

$$\sigma \leq \frac{n_M \eta \rho^2}{2 \gamma},$$  \hspace{1cm} (14)

or:

$$\theta \leq 2\sigma \delta \gamma + \eta \rho \gamma \gamma - n_M \eta \rho^2. \hspace{1cm} (15)$$

**Proof:** If (14) holds, then $\beta^* = \gamma / \rho$, which fulfils condition (12). If it does not, then $\beta^* = n_M \eta \rho / 2 \sigma$, which only satisfies (12) if (15) holds. QED
Proposition 4 captures the idea that the foreign power cannot threaten credibly to inflict on the dictator a large enough level of sanctions when their marginal cost is too high, if the dictator is too harsh. A mild oppressor can be deterred by an affordable level of sanctions, while a harsher one requires a too expensive strike. When the marginal cost is small enough, any type of dictator can be deterred from implementing the persecutions.

In figure 1, the set of \( \theta, \sigma \) pairs for which conditions (14) and (15) hold is represented by the area between the \( \theta = \delta \) horizontal line and the downward sloping curve representing the right-hand side of (15). Call this line the effectiveness contour.

\[
\frac{\eta_{M} \eta \rho^{2}}{2 \gamma}
\]

**Figure 1 : Alternative policies towards the oppressor**

Then, for the set of parameter values located above this contour, the remaining choice for the foreign power is between offering aid and imposing the sanctions. Both of these alternatives are costly, as they require some spending by the foreign power. Therefore, the conditions for aid to be the foreign power’s preferred means of intervention can be derived as in proposition 5.

**Proposition 5:** If the threat of sanctions is ineffective, the foreign power chooses to offer aid if:
\[ \theta \leq \eta + \delta - \frac{n_M \eta^2 \rho^2}{4\gamma \sigma}, \quad (16) \]

and imposes the level of sanctions \( \beta^* \) otherwise.

**Proof:** The foreign power chooses aid if:

\[ Y + n_M \eta y_M - a \geq Y + n_M \eta (y_M - \gamma) + \pi_\delta. \quad (17) \]

Substituting from (9), and taking into account that we are dealing with \( \{\theta, \sigma\} \) pairs located above the effectiveness contour, allows to derive condition (16). **QED**

There is thus a range of parameter values for which, while the threat of sanctions is ineffective, offering aid is cheaper than imposing the sanctions. This occurs for relatively low values of the harshness coefficient, because aid increases linearly with \( \theta \), from proposition 1, while \( \beta^* \) is independent of \( \theta \) (see (10)). The right-hand side of (16) shows the locus where the former becomes larger than the latter. It is represented in the relevant area of the parameter space, in figure 1, by the upward-sloping concave curve, which may be called the aid contour. Aid is chosen below it, and sanctions are imposed above it.

Therefore, the analysis performed so far yields a set of predictions depending on some crucial parameters. For small values of the dictator’s harshness coefficient, the latter refrains spontaneously from persecuting the excluded group, and no external intervention is needed. The ruler should not be called an oppressor in this case. Let us now focus on higher values of the harshness coefficient. If the marginal cost of sanctions is low enough the foreign power threatens sanctions, which are never imposed. Then comes a range of values of this marginal cost parameter where the foreign power threatens sanctions, but now imposes them if the harshness coefficient is large enough. For still higher values of the marginal cost of sanctions, there comes a point where the outcome crucially depends on the oppressor’s harshness coefficient, while a third type of equilibrium can occur. For low values of this coefficient, the foreign power threatens sanctions, which are never imposed. For larger values, aid is preferred, as it is cheaper than imposing sanctions. Lastly, for still higher values of this coefficient, the foreign power threatens sanctions, and imposes them as well.
This range of values of the marginal cost of sanctions is the most relevant for the real world, at least as far as most poor countries are concerned. In most cases, their international relationships with the rich countries involve either aid, or some forms of sanctions. The range of parameter values between (16) and the effectiveness contour, where aid is preferred, is large when the efficacy of sanctions in reducing directly the impact of the damage inflicted by the dictator is weak (i.e. $\rho$ is small). The empirical issue of the extent to which imposing sanctions on a country helps directly the victimised groups lies outside the scope of this paper. The case study of the Iraqi Kurds presented below suggests that this may be a relevant phenomenon in the real world, as mentioned above. Moreover, the size of the excluded group has the same type of effect, as shown by (16). Hence, aid is more likely to be preferred, the smaller the excluded group, while sanctions are more likely to be imposed when large excluded groups are involved.

4. EXTENSIONS

This model can be extended in various directions. First, we have shown above the potential for aid to entice the oppressor to refrain from persecuting the excluded group, without discussing the moral issue involved. In the real world, it would be difficult to convince the electorate in the donor country to pay higher taxes for transferring money to a dictator who is otherwise willing to persecute some citizens in his country. Many would vote for denying aid to this oppressor, as this would otherwise be a ransom paid for the excluded group taken as hostage. The model can be extended to take this effect into account\(^\text{12}\).

\(^{12}\) Another potential problem with giving aid to the dictator is incentive compatibility: if the harshness coefficient is private knowledge, even good governments who do not like victimising any citizens might be induced to pretend that they are dictators in order to receive aid. The incentive compatible aid contract would thus let dictators inflict some damage onto the excluded group in equilibrium, assuming that damage is divisible, in order to sort them out from the good governments, who would dislike this. It would probably also give some aid to the good governments, in order to reduce the pain left to the dictators to inflict on the excluded groups, while sorting out the good governments from the oppressors. This is an application of the classic rent-extraction/efficiency trade off.
The moral cost of aid to oppressors

Assume that the foreign power incurs an additional cost of providing aid to the dictator $\mu a$, called the ‘moral cost’ of aid to an oppressor. This does not affect the level of aid that the foreign power delivers, when it does so, because (6) is still binding. What is affected is the range of parameter values for which the foreign power will provide the aid. Now aid will be denied unless:

$$\theta \leq \delta + \frac{\eta}{1 + \mu} \left(1 - \frac{nM\eta}{4\sigma \gamma} \right).$$

(18)

Therefore, the borderline between the area where aid is chosen and that where sanctions are imposed shifts downwards. This reflects the fact that aid is now less attractive, so that imposing sanctions on the marginal dictator becomes relatively cheaper. This change does not affect the analysis of the role of sanctions. Therefore, the moral cost of aid to the oppressor provides an incentive to impose sanctions more easily for relieving the pressure exerted by the latter on the excluded group. Hence, the moral cost of aid to a dictator is borne ultimately by his victims, for some values of the parameters, insofar as persecutions are then implemented, while the sanctions only reduce their effect partially.

The second extension that we perform here involves income effects. This is an important avenue by which the credibility of sanctions is enhanced.

Income effects

The previous section analysed a model where the sanctions have no income effect, as reducing the resources available to the dictator does not lead him to reduce the amount of damage that he inflicts on the excluded group. One might argue to the contrary that a fall in the resources available to the favoured group should reduce the dictator’s willingness or ability to inflict some damage on the victimised group. Like aid, sanctions enter the problem through the budget constraint, and could have an effect through this channel.

A simple way to take this type of effect into account, without changing fundamentally the model, is to change the assumption about the means of inflicting damage to the excluded group. Assume now that $D \in \{0, \varepsilon c\}$. This is a simple way of capturing the co-movement of the consumption of the favoured group and the pain inflicted on the
victimised group, as a response to changes in income. However, this does not result from a
property of the ruler’s utility function, but from the technology used for inflicting damage
onto the excluded group. It captures the idea that an expansion in the ruler’s budget set
allows him to inflict more damage. For example, this could result from the fact that only a
given fraction of the ruler’s income, say the output of the tradable sector (e.g. oil), can be
exchanged against the required weapons, imported from abroad. In the case of the Iraqi
Kurds, discussed below, this kind of effect has probably played a part in keeping Saddam’s
army at bay.

Now, the budget constraints facing the two types of consumers, in the case where
sanctions are imposed, within the relevant range, are:

\[ c = y - n_{M} \varepsilon \delta c \beta. \]  
\[ (19) \]
and:

\[ c_{M} = y_{M} - \varepsilon c + \rho \beta. \]  
\[ (20) \]

The assumed income effects do not change the condition for spontaneous restraint
\( \delta \leq \delta \). The other ones are slightly changed. After substituting from (19) and (20), the foreign
power’s utility function becomes:

\[ \tilde{U}^{F} = Y + n_{M} \left( y_{M} - \frac{\varepsilon y}{1 + n_{M} \delta \varepsilon} \right) - n_{M} \left[ \rho + \frac{\varepsilon}{1 + n_{M} \delta \varepsilon} \right] \beta - \sigma \beta^{2}. \]  
\[ (22) \]

Following similar steps as in the previous section, define the modified profit function
from sanctions as:

\[ \tilde{\pi}_{S} = \max_{\beta} \left( n_{M} \left[ \rho + \frac{\varepsilon}{1 + n_{M} \delta \varepsilon} \right] \beta - \sigma \beta^{2} \right). \]  
\[ (23) \]

Comparing with (9), in the relevant range, shows that the income effect enhances the
efficacy of the sanctions. In particular, the profit from imposing the sanctions can now be
positive if \( \rho = 0 \) or even for low negative values. Hence, the existence of the income effect
makes the condition bearing on \( \rho \) less stringent than in the previous case. For example, (23)
might be positive even if \( \rho < 0 \), i.e. even if the foreign power cannot avoid doing more harm
to the excluded group when imposing the sanctions, provided this negative impact is more than offset by the fall in the damage inflicted by the dictator. In other words, the threat of sanctions might now be credible even if the foreign power is unable to reduce directly the harm done to the excluded group, provided it can reduce it significantly in an indirect way through the fall in the oppressor’s income and his ability to inflict damage. The income effect thus expands significantly the range of parameter values for which the threat of sanctions is credible.

Now the optimal level of sanctions chosen ex post by the foreign power is:

$$\tilde{\beta}^* = \frac{n_M \eta}{2\sigma} \left( \rho + \frac{\varepsilon}{1 + n_M \delta \varepsilon} \right) > \beta^*.$$  \hfill (24)

Similarly, this income effect changes the level of the sanctions required to induce the dictator to give up victimising the excluded group. Using (19) and (20) again, the threat of sanctions is effective provided:

$$\tilde{\beta}^* \geq \frac{n_M [\theta - \delta] \varepsilon y}{1 + \theta n_M \left( \rho + \varepsilon (1 + n_M \delta \rho) \right)},$$  \hfill (25)

while the denominator is positive.

Therefore, assuming, for the sake of comparison with (12), that $\varepsilon y = \gamma$, and that $\rho \geq 0$, the income effect makes the condition for effectiveness of the sanctions less stringent than in the previous case. Threatening to impose a lower level of sanctions than in the previous sections may now be enough for inducing the dictator to give up persecution. This is again due to the indirect impact on the damage inflicted via the oppressor’s income, which amplifies the effect of the sanctions. As a result, the effectiveness contour in figure 1 shifts out relative to the previous case. In particular, the vertical asymptote has now the following, larger, abscissa:

$$\sigma = \frac{n_M \eta \left( \rho + \varepsilon (1 + n_M \delta \rho)^2 \right)}{2 \varepsilon y}. \hfill (26)$$

The threat of sanctions is then used for a larger set of parameter values.

The minimum required level of aid for convincing the oppressor to refrain from victimising the excluded group becomes as follows:
\[ a = n_M [\theta - \delta] \frac{\varepsilon y}{1 + n_M \delta e} , \]

which is lower than in the case without income effect, if \( \varepsilon y = \gamma \). This is because the income effect entails a proportional cut in consumption when the persecution is carried out, which does not take place when aid is given.

Lastly, the aid contour, i.e. the borderline between the zone where aid is given and that where sanctions are imposed, in figure 1, becomes:

\[ 0 \leq \eta + \delta - \frac{n_M \eta^2 (\rho + \varepsilon (1 + n_M \delta \rho))^2}{4 \sigma \varepsilon y (1 + n_M \delta e)} . \]

Comparing (28) to (16) shows that the aid contour shifts downwards in figure 1 with the introduction of income effects. Combined with the upward shift of the effectiveness contour for the threat of sanctions, this entails that the scope for using aid is reduced, as the area where aid is the preferred solution shrinks in the parameter space.

Nevertheless, both this and the preceding sections have shown that a crucial element for explaining why sanctions are actually imposed in some cases is their positive effect in favour of the excluded group. This may come directly via a reduction in the harm inflicted by the ruler, as in the previous section, or indirectly through cuts in the ruler’s income, as in the present one. These two variants of the model thus result in the same diagnosis: sanctions are imposed when two conditions are met: (i) they are ineffective at deterring the oppressor, and (ii) they have some positive fallout on the targeted group. Point (i) has already been discussed in the literature, point (ii) is more novel. A full-blown econometric test of this proposition falls outside the scope of this paper, but the next section aims at gauging its realism by confronting it to a case study of the fate of the Iraqi Kurds since sanctions have been imposed on Iraq.

5. THE CASE OF THE IRAQI KURDS

The Kurds are ethnically different from the other groups in Iraq, making them easily identifiable victims for the ruler, as assumed in the model above. They belong to the Iranian branch of the Indo-European ethno-linguistic group, which is divided between four
countries: Turkey, Iran, Iraq and Syria, while the ruling group is Arab. They form the largest stateless ethnic group, numbering approximately 20 to 25 millions\textsuperscript{13}, but they are a minority in each of the countries. The Iraqi Kurds are about 4-5 millions, i.e. about 15-20\% of the Iraqi population. From the creation of the modern state of Iraq until the creation of a “safe haven” to protect the Kurds (1991), the history of Iraqi Kurdistan is one of political and cultural repression, destruction and ethnic cleansing, illustrating vividly the type of persecution modelled above. In the 1990s, Iraqi Kurdistan was divided into one part directly governed by the Baghdad regime, while the rest has been governed by the Kurds themselves for a decade\textsuperscript{14}. In the “safe haven” under Kurdish control, free elections were held (1992) and a Kurdistan National Assembly (KNA) was elected, a Kurdistan Regional Government (KRG) was formed, with its own police force and army. Despite a period of war between the two Kurdish factions (1994-1996), they were living a “Golden age” period\textsuperscript{15}.

**Historical background**

The early history of the Iraqi Kurds illustrates how strongly different is their collective identity from the other Iraqi groups. When the Ottoman Empire was divided after World War 1, the new country of Iraq was formed from the vilayets of Baghdad and Basra, and the Hashemite monarchy was established under King Faysal (1921)\textsuperscript{16}. The treaty of Sèvres in 1920 promised an autonomous Kurdistan, but it was never ratified. Instead, the Lausanne peace treaty between the allies and Turkey (1923) did not mention any rights for the Kurds\textsuperscript{17}. In 1925 the League of Nations Council attached the predominantly Kurdish vilayet of Mosul, with its oil fields, to Iraq, under the pressure of Great Britain, despite the

\textsuperscript{13} According to the CIA Factbook (2002) and the Kurdish Human Rights Project (2002), the Kurds are 15 millions in Turkey, 6.5 in Iran, 3.5 to 4.8 in Iraq, 1.1 in Syria, 200,000 in Azerbaijan, 75,000 in Armenia, 40,000 in Georgia. According to the Kurdish Institute in Paris, the Kurdish Diaspora in Western Europe is about 850,000, 200,000 in Afghanistan, 80,000 in Lebanon. Depending on the source, estimations of the Kurdish population are between 20 and 40 millions.

\textsuperscript{14} There are other peoples living in Kurdistan (Arab, Turkmen, Assyrian-Chaldean and Armenian). Sometimes the word **Kurdistani** is used to refer to all the people living in Kurdistan.


\textsuperscript{16} Iraq, however, was not fully independent, and was under a British mandate.

\textsuperscript{17} Since the treaty of Sèvres, Kurds were not mentioned in any subsequent international document until the UN Security Council Resolution 688 was passed in April 1991.
reluctance of the Kurds. The 1919-1930 period witnessed a continuing struggle against the British, under Sheikh Mahmoud Barzinji of Suleymaniye, the self-proclaimed King of Kurdistan. These revolts were crushed by the Royal Air Force (RAF). During the years between the independence of Iraq and World War 2, there were rebellions by the Iraqi Kurds, among particular tribes in the Barzan's area. An Iraqi Kurd, Mustafa Barzani, emerged as a leader of Kurdish rights, and participated in the creation of the short-lived Kurdish autonomous republic (the Mahabad Republic, January-December 1946) in Iran. In the same year, he founded the Kurdistan Democratic Party (PDK). In 1958, the king of Iraq was overthrown, and the new republican government of Abdul Karim Qasim was supported by all the political parties including the PDK. The Provisional Constitution (Article 3) claims that “Arabs and Kurds are partners in this fatherland”, but Qasim was killed in a military coup (1963), and the new regime was dominated by the Ba’th party (Arab Socialist Party). This so-called first Ba’th regime was toppled by a military coup led by Abd-al-Rahman Aref, in November 1963. On July 14, 1968, a bloodless coup established the second Ba’th regime, with Ahmed Hasan al-Bakr as president, and Saddam Hussein as his deputy.

The Iraqi governments have consistently invested resources for fighting the Kurds, or victimising them, as predicted by the model under autarky. Since 1958, each Iraqi government at first pursued peace talks with the Kurds, only to fight them later (Rabil, 2002). Thus, in 1960, the concessions to the Kurds were withdrawn, and in 1961, Barzani launched the armed struggle. During the next 15 years, the Iraqi government carried out an extended campaign of “Arabisation” of the Kurdish areas, including armed warfare, destruction of villages and deportation of Kurds, moving Arabs into Kurdish areas, etc. In 1969 and 1971 the Iraqi regime deported thousands of Faylis Kurds (Shi’as) to Iran. In 1974, the Kurdish fighters known as *peshmerga* (those who face death), spearheaded by the PDK, received some arms and other forms of support from Iran. The rebellion escalated but was crushed in April, 1975, when the Algiers Agreement was signed between the Shah and Saddam. The Shah abruptly withdrew his support to the Kurds in returns for a favourable redrawing of the southern border between Iran and Iraq along the waterway (Shat-al-Arab) to the Persian Gulf. This shows that Saddam was prepared to make some important concession for
weakening the Kurds. After the collapse of the Kurdish resistance, Jalal Talabani, formed a splinter party, the Patriotic Union of Kurdistan (PUK) in 1975. In 1979, the Shah was overthrown, Ayatollah Khomeini established the Islamic Republic of Iran, and Saddam Hussein became president. In 1980, Iraq reneged on the Algiers agreements, and attacked Iran. The resulting war opened a window of opportunity to the Kurdish rebellion, as both Iran and Iraq used them against each other.

During the Iraq-Iran war, the Ba’th regime hardened its policy toward the Kurds, and launched the “Terminator of Traitors” operation, under Saddam’s personal command, aimed at crushing the rebellion (Rabil, 2002). It culminated, from February 23 to September 6, 1988, with the Anfal campaign, named after the eighth verse of the Koran authorising the plunder of infidels. In March 1987, Ali Hasan al-Majid, a cousin of Saddam’s, became head of the Northern Bureau dealing with Kurdistan. He decided to evacuate and destroy all the Kurdish villages, concentrating their inhabitants in camps along the main highways, and physically eliminating all hostile groups. Chemical weapons were used against strongholds of resistance and inaccessible mountain villages. Al Majid had the massacres and deportation, and the effects of chemical gas on the population, filmed. During the Kurdish uprising of March 1991, part of their archives fell into the hands of the resistance, which passed them on to Human Right Watch (HRW)19. This material, including 5.5 million pages of documents, military maps, audio and videotapes, and photographs, weighting about 18 tons, was transferred to the University of Colorado at Boulder (USA) for safekeeping and analysis20. Part of these documents are analysed by HRW and part of this research is available on their web site21. The campaigns involved mass summary executions and disappearance of tens of thousands of non-combatants, and sometimes the entire population of villages22, widespread use of chemical weapons, including mustard gas and nerve agent

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18 He is known to Kurds as “Ali Anfal” or “Ali Chemical”.
19 An agreement among Kurds, the U.S. Senate Foreign Relation Committee and Human Rights Watch, resulted in the materials being airlifted out of Iraq under U.S. military cover.
20 An electronic copy of these documents is also available at Iraq Research and Documentation Project, Center for Middle Eastern Studies, Harvard University. (http://www.fas.harvard.edu/~irdp/).
22 “By our estimate (HRW), in Anfal at least 50,000 and possibly as many as 100,000 persons, many of them women and children, were killed out of hand between February and September 1988”.
GB, or Sarin, against the town of Halabja (March 16, 1988) as well as many Kurdish villages, killing several thousand people; the destruction of some 2000 villages as well as at least a dozen of larger towns and administrative centres and looting of civilian property and farm animals on a vast scale by army troops and pro-government militia. The destruction of Kurdish towns continued in 1989. For example, Qala Diza a city of 120 000 people on the Iranian border, was evacuated and destroyed (June 1989). This was the last major action of the campaign. In December 1989, Saddam considered the Kurdish question settled, and abolished the Northern Bureau. According to the Ministry of Reconstruction and development of the Kurdish Government, a total of 4006 village were destroyed (table 1)\(^23\). According to Nezan (1998): “The countryside (of Iraqi Kurdistan ) was riddled with 15 million landmines, intended to make agriculture and husbandry impossible. A million and a half Kurdish peasants have been imprisoned in camps. Since 1974, over 400,000 died in Baghdad’s war against the Kurds. Almost half this number disappeared without leaving any trace. About 10% of the total Kurdish population of Iraq perished”.

**Table 1 : Iraqi Kurdistan villages statistics**

<table>
<thead>
<tr>
<th>Governorates</th>
<th>Original Number of villages</th>
<th>Number of destroyed villages</th>
<th>Number of reconstructed villages since 1991.</th>
<th>Villages remaining to be reconstructed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dahuk</td>
<td>1123</td>
<td>809</td>
<td>470</td>
<td>339</td>
</tr>
<tr>
<td>Erbil</td>
<td>1497</td>
<td>1205</td>
<td>800</td>
<td>405</td>
</tr>
<tr>
<td>Suleimaniye</td>
<td>2035</td>
<td>1992</td>
<td>1350</td>
<td>642</td>
</tr>
<tr>
<td>Total</td>
<td>4655</td>
<td>4006</td>
<td>2620</td>
<td>1386</td>
</tr>
</tbody>
</table>


The sanctions imposed on Saddam’s regime in the 1990s reduced considerably its ability to victimise the Kurds, and had a series of positive fallout, described below.

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\(^23\) This study does not include the province of Kirkuk, were several hundred more villages were destroyed.
International sanctions on Iraq and the Kurds

On August 2, 1990, Saddam Hussein occupied Kuwait, and UN resolution 660 condemned the invasion. Four days later, UN resolution 661 imposed sanctions on both Iraq and occupied Kuwait. On January 17, 1991, the US-led allied forces began bombing Iraq, as part of the Desert Storm Campaign, culminating in the eviction of Iraqi forces from Kuwait. The Allies declared a cease-fire on February 28, 1991, ending the Gulf war. The weakening of the Iraqi regime together with President Bush’s appeal to rise against Saddam’s regime led the Shi’a Arab population in the south and Kurds in the north to rebel. Within three weeks, all the Kurdish area was in rebellion, and the towns of Ranya, Suleymaniye, Erbil, Dahuk, Aqra, and Kirkuk were under Kurdish control. However, the “Kurdish spring” was short-lived, as Saddam marched back into the territory just captured by the Kurds with his Republic Guard, and within a week recovered it all. Hence, his retreat from Kuwait had not reduced Saddam’s drive to fight the Kurds. The allies did little to stop the repression. About two millions Kurds fled towards the Turkish and Iranian Borders.

The allies stepped up their pressure on the Iraqi government, with the explicit goal of protecting the Kurds. This suggests that the welfare of this group was worth some additional effort for them, as assumed in the theoretical model. UN resolution 688 (April 5, 1991), at the initiative of France, condemned the repressive measure by the Iraqi regime against civilians, and “in particular the Kurdish population”. Great Britain proposed to create an “enclave” for Kurdish refugees on Iraqi territory. The US required Iraq to cease all military activity north of the 36th parallel (Malanczuk, 1991), threatening to use force in case of military interference with the international relief effort for the Kurds. Operation “Provide Comfort” (1991) created a “safe haven” for the Kurds. The area of Iraq north of the 36th parallel was declared a no-fly-zone: any Iraqi plane flying over it was exposed to reprisal. The allies added in August 1992 a no-fly-zone in the South, excluding any Iraqi flight south of 32 degrees. The no-fly-zones were regularly patrolled by US, British, and French aircraft. The Kurdistan Front, an umbrella organisation of the main Kurdish groups, took control of the no-fly-zone, i.e. the

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24 On March 2, 1991, the United States radio broadcasts urged the Iraqi to rise against the Saddam Hussein regime.
three provinces of Dahuk, Erbil and Suleymaniye, comprising 42,000 squares kilometres\(^{25}\) and about 3.7 million people\(^{26}\). The Iraqi Kurds have then been under self-government for more than one decade, and have benefited from it despite a period of war. There are two phases, before and after the oil-for food program, launched in 1997.

Despite huge pressures from Baghdad and from the neighbours (Turkey, Iran and Syria), on May 19, 1992, the Iraqi Kurds held the first free elections of their history, for a National Kurdistan Assembly (NKA), and formed a Kurdistan Regional Government (KRG). The KNA has 105 seats, 100 seats reserved for the Kurds and 5 for the Christian minority (Assyrians and Chaldeans). To win seats, parties had to get at least 7% of the votes. Seven member parties of the Iraqi Kurdistan Front participated in the elections, while Muzaffer Aslan, the leader of IMTP (Iraqi National Turkmen Party), declared that his party “would not take part in an election which threatens Iraq’s territory integrity”, reflecting presumably some Turkish fears (Gunter, 1993). Two parties passed the 7% hurdle: KDP led by Massoud Barzani, Mustafa Barzani’s son, and PUK led by Jalal Talabani, and they agreed to share the 100 Assembly seats “fifty-fifty”. On October 4, the KNA voted unanimously for a federal solution to the Kurdish problem, within a united and democratic Iraq. However, a war broke out between PDK and PUK (1994-1996), about the sharing of power and of trade tax revenues from the crossing point of Habur/Zakho (Bozarslan, 1996), which was under the control of PDK. About 3000 people were killed and tens of thousands displaced\(^{27}\). Since then, the liberated Iraqi Kurdistan has two separate governments: one in Erbil (PDK), and one in Suleymaniye (PUK).

Despite these difficulties, the Kurdish economy was less disorganised than the rest of Iraq under Saddam’s control. The inflation rate in 1994 was 800% for Kurdistan and 1800% for Iraq (Bozarslan, 1996). This is the unexpected result of the “monetary operation” of Iraq in May 1993. In order to destabilise Kurdistan, Baghdad decided to withdraw the notes of 5,

\(^{25}\) According to FAO, the area of Iraqi Kurdistan under KRG administration amounts to 9% of the total land area of Iraq (437,400 square kilometres). This makes KRG-administered Iraqi Kurdistan approximately 40,000 square kilometres, roughly the same area as Switzerland (39,800).

\(^{26}\) According to WFP (UN World Food Program) food beneficiary figures, the population of KRG-administered Iraqi Kurdistan is approximately 3.7 million.

\(^{27}\) Kendal Nezan (2001).
10 and 25 Iraqi Dinars (supposed to be printed in Switzerland), without any possible exchange outside the regions under its control. The Kurdish authority decided to keep these old notes valid in Iraqi Kurdistan, for an amount worth about 500 million Dinars (Bozarslan, 1996). The notes of 25, 50 and 100 Iraqi Dinars printed in Iraq were not valid in Kurdistan: thus the non valid Dinar in Iraq became valid in Kurdistan and vice versa. This operation enhanced the autonomy of Kurdistan, having then its own currency. The “Kurdish” Dinar (or “Swiss” Dinar) could be exchanged against all foreign currencies, while the Iraqi Dinar was itself considered as a foreign currency. In 2001 one US $ was worth 16-18 Kurdish Dinars and this exchange rate was relatively stable, while one US $ was worth about 2000 Iraqi Dinars, with a highly volatile exchange rate. The stock of Kurdish money was fixed, and even decreasing, as the torn notes, printed before 1991, could not be replaced. Iraqi Kurdistan is now dollarised for all important transactions.

Before the oil-for food resolution, Iraqi Kurdistan had mainly two sources of revenue: humanitarian aid and transit fees. Foreign aid, from private and government sources, was the most important one. For example, from 1991 to 1993, the amount of aid was above 2.7 billion US $ (Bozarslan, 1996), but it has decreased significantly after that. The other source was transit fees revenue, based on legitimate or smuggled goods that contravene either the UN sanctions or one of the three neighbour’s own laws (Turkey, Iran and Syria). One trade line involves Turkish trucks that annually ferry several million tons of oil from Iraq into Turkey, and bring back consumer goods into Iraq. A second trade line involves Turkish trucks trading with Iran, while a third line has recently opened with Syria.

In 1998 a peace agreement was signed in Washington between Talabani (PUK) and Barzani (PDK) under the aegis of the US secretary of State Madeleine Albright. Free and fair local elections, with international observers, were conducted in a dozen of municipalities in 2000 and 2001 in the PUK and PDK area respectively (O'Learly, 2002). For the first time in six years, the KNA with all its members held a meeting on October 4, 2002, and approved the

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28 The 25 Dinar notes are not valid in Iraqi Kurdistan.
29 Since the Kurdish population anticipates a regime change in Iraq and think that the "Swiss Dinar" will be the official Dinar of a post Saddam government, the value of US Dollar fell sharply: one US dollar was equal only 11 Kurdish Dinar (mid-October 2002).
30 Iraqi Kurdistan receives also important amounts of out-migrants’ remittances.
Washington agreement. As a further step for reunifying the two administrations, the PUK reopened its main office in Erbil and the PDK in Suleymaniye, in February 2003. Since the sanctions and the no-fly-zone were implemented (1991), the Iraqi Kurds are enjoying more freedom than at any other time in their modern history. All primary and high schools are in Kurdish, there are three Universities, of which two opened since 1991. Depending on the disciplines, the courses are in Kurdish, Arabic or English. Other ethno-religious minorities, the Assyro-Chaldeans (Christian) and the Turkmen, can teach in their own language and have their own political parties and associations. Efforts have been made to include members of the different ethno-religious groups in both KRG cabinets. In both regions, there is a relatively free press, a dozen of free-ranging newspapers, and more than 130 weekly magazines, more than ten TV channels (two by satellites). People can have international channels via satellite, which are forbidden in Iraq and Iran, as well as international telephone calls and internet cafés, with unrestricted access to the web. All this is banned or restricted in the rest of Iraq, where Internet cafés are opened under police permits, for access to approved web sites. The Freedom House rating for the Kurdistan’s political rights and civil liberties improved from 6 to 5, and its status changed from “not free” to “partly free”.

The oil-for-food resolution and the end of the war between PDK and PUK contributed to create an economic boom in Iraqi Kurdistan. In 1996 the Iraqi government and the UN reached an agreement on implementing resolution 986 (1995), adopted 13 months earlier. The latter created the oil-for-food program, allowing Iraqi oil to be sold for purchasing humanitarian supplies. At first, the UN set a ceiling of two billions dollars on oil export for each phase of six months; then the ceiling was raised to $5.2 billions (1998), and it was removed in 1999. A 13 % share of this revenue is allocated to the three Provinces under Kurdish control (Northern Governorates). The revenues from the oil-for-food resolution are managed by more than ten UN specialised organisations present in Kurdistan (UNDEP,

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32 For comparison: Turkey is partly free (political right 4, civil liberties, 5); Iraq not free (7,7); Syria not free (7,7); Iran not free (6,6).
33 One of the landmarks is a supermarket (Mazi) built in Dahuk, the first of its kind anywhere in Iraq. It is such a novelty that it attracts people even from Baghdad, who make a day drive to shop in it.
WHO, HABITAT, FAO, etc), cooperating with the Kurdish administration. These UN organisations finance and implement projects in education, health, infrastructure, etc. on behalf of the Iraqi government, absent from the region (the projects must have the agreement of the Iraqi government). The Kurds protect the UN agents, propose projects, freely provide stores and technical facilities, etc. The Kurdish authorities, with UN supervision, have used their share of revenue to build schools, roads, hospitals, sewage systems, and other development projects, even in rural areas. About 2700 schools were created since 1991\textsuperscript{35}. More than 70% of the destroyed villages are reconstructed (table 1). The infant mortality rate is half the one in the rest of Iraq, and it is lower today than it was in 1990 when the UN first imposed sanctions. The UNICEF 1999 report states that in 1990 the child mortality rate in Centre-South Iraq (under Baghdad’s control) was 56 while the rate in Kurdistan was 80. In 1999 the report states a child mortality rate of 131 for the Centre-South, while for Kurdistan this rate was 72. Further, there are steady improvements in the nutrition status of children. The percentage of underweight children under the age of five years fell from 25.8 % in 1994 to 10.7 % in 2002\textsuperscript{36}.

Therefore, while the case of the Iraqi Kurds does not reflect all the assumptions of the theoretical model presented above, it supports its mainstay: the sanctions allowed to improve substantially the fate of a large part of this people. Part of the improvement came through some targeted foreign aid, which would never have reached Iraqi Kurdistan if the normal aid process had been pursued, under Saddam’s control. This corresponds in part to the direct positive fallout assumed in the first variant of the model. Moreover, a large share of the improvement can be credited to the reduced ability of Saddam’s regime to victimise the Kurds, an activity to which it devoted a lot of resources previously. This came partly from the reduced resources available to Saddam, but mainly from the constraints imposed by the allies. The resulting economic freedom did a lot to foster some relative prosperity, and improve the lot of the Iraqi Kurds.

\textsuperscript{35} According to the prime minister of KRG (Suleymaniye), Washington Post December 9, 2002.
6. CONCLUSION

This paper discussed the relative merits of aid and sanctions for influencing an oppressor, who seeks to victimise an excluded group in his country. This type of dictator is common in the real world, as illustrated in the introduction. Within a contract-theoretic framework, we first analysed the determinants of aid in this model, and showed that conditional aid is potentially powerful for affecting the choice of the oppressor.

Next, we analysed sanctions, discussing several variants of the model. In the first one, the level of damage inflicted by the dictator is exogenous, while the moral cost of giving aid to a dictator and some income effects are included in the next two variants. The foreign power can choose between threatening sanctions and offering aid. While the latter is assumed to raise no commitment problem, the former are assumed self enforcing. They must be the foreign power’s *ex post* optimal response to be imposed. The conditions for these threats to be credible and effective bring out the importance of their positive effect in favour of the excluded group. The sanctions are imposed if the foreign power cannot credibly threaten a high enough level of sanctions for them to be effective. The benefits from imposing the sanctions in response to the dictator’s implementing the persecution cannot come from their deterrent effect, but through the direct or indirect effect that they can have on the damage actually inflicted to the victimised group. When the conditions for effectiveness are fulfilled, the threat of sanctions, which costs nothing if it is credible and effective, is always preferred to the use of aid by the foreign power.

However, aid may be preferred when the credibility constraint prevents the threat of sanctions from being effective. There exists a range of parameter values for which the foreign power uses aid, rather than sanctions, because it is cheaper. This range might be large if the sanctions are not very effective at reducing the impact of persecution on the excluded group, and if the income effect is not strong enough to offset this problem. On the other hand, when the excluded group to be protected is too large, given the other parameters, there is no room left for aid to be the preferred means of action. Hence, aid is preferred for small countries, or for protecting small groups. The model predicts also that the threat of sanctions might be
both credible and ineffective at deterring the dictator. Then the sanctions are imposed, unless aid is given. This provides some theoretical explanation for the generally disappointing effect of sanctions found in the applied literature.

The potentially important ‘moral cost’ of giving aid to a dictator is somehow counterproductive, in that it reduces the range of parameter values for which the foreign power prevents the persecution, when there exists a window for aid. The ‘moral cost’ of giving aid to a dictator thus falls eventually on his victims, as it expands the set of parameter values for which he is left to persecute them first, and then be punished for that. The third variant of the model assumes that the level of damage inflicted by the oppressor is affected by an income effect. Then, imposing sanctions has an indirect favourable effect on the excluded group, by reducing the harm done, because of its negative effect on the oppressor’s income. Then, the scope for aid is reduced, while the requirements for credibility and effectiveness of the threat of sanctions are relaxed.

The case study of the Iraqi Kurds discussed in the penultimate section shows that the sanctions against Iraq had a favourable impact for this excluded group. The latter have made the most of the newly acquired breathing space, with some promising economic developments. This suggests that this type of fallout should be taken into account when appraising the effects of actual sanctions. The theory presented here predicts that the latter should not be evaluated against the degree of achievement of their stated objectives, i.e. deterrence, which is necessarily missed when they are imposed. This brings out one of the deficiencies of the current literature on sanctions effectiveness.

To reach these results, we used many simplifying assumptions. Nevertheless, the model provides some useful insights into the potential role of aid for taming oppressors, and into the credibility constraint bearing on the use of the threat of sanctions for protecting victimised groups. Similarly, it highlights some issues raised by the choice between aid and the threat of sanctions for inducing oppressors to reduce their persecution activity. However, the model suffers from one important limitation, by restricting the analysis to a two-agent static setting. In a more general framework, imposing sanctions on an oppressor may be a way for the foreign power to signal its type, or to establish a reputation, in order to enhance
its credibility in dealing with other dictators, or with the same dictator in the future. This shows the way to future research.

REFERENCES


