Deutscher Tropentag 1999 in Berlin
Session: Institutions and Organizations in Rural Development – Resource Tenure

Social Conflict and Land Tenure Institutions as a Problem of Order Policy: the Case of Guatemala

Thomas Miethbauer

Kiel University, Department of Agricultural Economics, Germany
tmiethbauer@email.uni-kiel.de

Abstract
Registered and publicly enforced title ("formal title") is supposed to have specific advantages which in sum promote an efficient resource allocation through a functioning land market. A simplistic market model is applied to discuss certain institutional deficiencies which directly affect the credibility and function of formal title in Guatemala. But it is argued that the assignment and security of landed property rights have to be understood as an integral part of a constitutional mix of rights. The problems of extended poverty and conflict, concentration of landholdings and allocative inefficiency of land use have been set in a wider constitution-economic framework of legitimate social order.

Keywords: Guatemala, Land tenure, Constitution economics

I. Introduction
Many Guatemalans still live a "poore, nasty, brutish [...] life"[1]. Property rights, especially in land, and human rights —even though to a lesser extent than a decade ago— are insecure. Social live displays characteristics of anarchy. Violent conflicts abound. "Predatory" behaviour —e.g. land invasions/occupations and kidnapping— and corresponding defence or enforcement costs are part of the situation. A legitimate social order, based on a consensus about what "law" is and including enforceable rule compliance, is still to be agreed. But reforms have been initiated.

This paper discusses the transaction-cost-intensive institutions, which regulate access to land in Guatemala, in a broader, mainly constitution-economic framework. Some institutional impediments to secure, formal land title which directly constrain allocative efficiency will be depicted. But it will be argued that the emergence and acceptance of secure property rights in land cannot be treated in isolation from other general rights ("entitlements") derived as part of a constitutional mix. In this way property rights can be modelled according to Buchanan (1975) as the result of a hypothetical social contract among unequals[2] which might include certain public good policies —e.g. education and the judicial system— through a constitutionally empowered collectivity ("state") within agreed rules.

Thus, if the constitution is understood as a system of formal meta rules then property rights in land and the respective rules concerning the usus, usus fructus and abusus of land (i.e. "land tenure institutions") are a subsystem belonging to a hierarchy of rules[3]. Therefore land tenure institutions are an interwoven part of a society's total stock of institutions and enshrined values, a part of what has been called "culture" (Kasper/Streit, 1999) or "social capital" (Coleman, 1990). The consequent interdependence of a society's political and economic system which can be derived from the foregoing argumentation has been depicted below the German **"Ordnungspolitik"** (Eucken, 1952; Cassel, 1988; Leipold, 1994) as well as in the still rather empirical than theoretical concept of **"good governance"** (Campos/Nugent, 1999). Brunetti et al. (1997), in a different empirical approach, try to explain variables of the economic system by an aggregated variable they call **"credibility of rules"**, including predictability, property security, political stability and performance of the judiciary. These

concepts will be referred to while discussing certain issues relevant to Guatemala with the emphasis on the distinction between legitimacy and credibility of rules.

On December 29,1996, after a years long process of peace talks the leftist insurgency, which developed through several stages since 1960 and coalesced in the Guatemalan National Revolutionary Unity (URNG) in 1982, and the Guatemalan government signed a final peace accord, setting an end to a civil war, which cost around 200 thousands victims and more than one million internal and external refugees. The peace settlement comprise several accords on specific issues, among them the very important ones on indigenous rights and land tenure aspects. This historic situation of constitutional "re-negotiation" —as it will be called later on— makes Guatemala a good example for a constitution-economic framework. Besides pointing out the need for specific reform, the analysis wants to add to the ongoing debate in Guatemala (and elsewhere) about the "land (distribution) problem". It will do this by widening the focus from a purely physical-spatial dimension, technical aspects of titling and emphasis of the normative advantages of property to a societal perspective.

The following section II depicts what is currently understood in Guatemala as the "*problema de la tierra*" ("land problem") and discusses certain institutional impediments to a secure land title. Transaction costs of formal property title and the role of complementary policies and markets like public law enforcement and credit market access are the key issues here. A simplistic market model for what is called "formal title" will be applied. In section III an analytical framework will be introduced for further discussion of the problem of law enforcement and the emergence of property as a social institution. Section IV refers to this framework and points out certain institutional shortcomings in the public policy sphere which are indirectly but nevertheless in an important way linked to property issues and thus to the land tenure system. Political participation, the recent constitutional referendum and ethnicity problems will be the important issues. The main conclusions will be summarised in section V.

II. The Land Distribution Issue and Problems of Secure Title to Landed Property

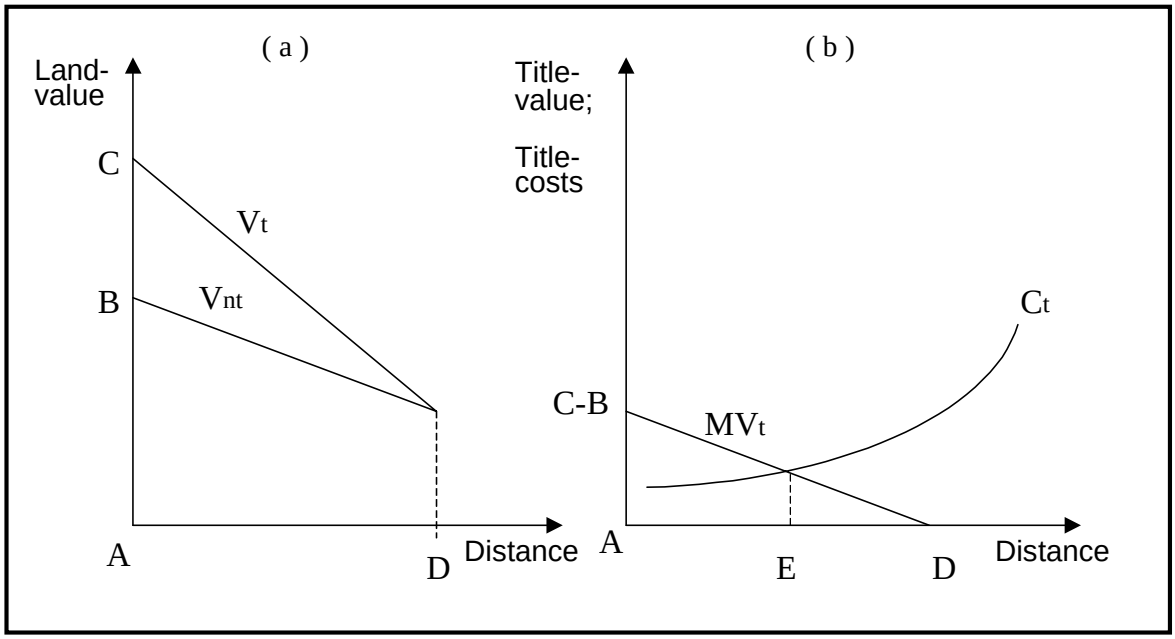
The land tenure situation in Guatemala can be characterised by a very high degree of concentration in landholdings, which equals a high concentration in ownership given the still low incidence of land lease. According to the latest agricultural census 2.5 percent of Guatemala's 5.3 million farms control 65 percent of the agricultural land (the average farm comprises 200 hectares) whereas 16 percent of the land is cultivated by 88 percent of the smallest farms (with an average size of 1.5 hectares). The Gini Index has been calculated as 85.9, which is exceeded nowhere in the world, except by Venezuela and Paraguay[4]. Given the fact that still a large proportion of the population earns its income in agriculture, that the factor-rent-shares have not changed over decades, that the labour force has increased significantly and that secondary income distribution via income tax is negligible, hence the distribution of landownership explains at least partly the very unequal distribution of total income[5]. This situation of relative income is accompanied by increased extreme poverty within the majority of the population. Thereby poverty is an acute problem within rural areas, especially for the indigenous population where within each income decile the indigenous are more likely to have smaller landholdings[6]. This situation is accentuated by the observation of the so-called "*tierras occiosas*", that depicts vast areas of privately owned arable land, which according to specific agronomic standards is rated as under-utilised and is —according to law but not de facto— subject to penalty taxation and even expropriation. By contrast, especially in smallholder agriculture an over-utilisation of marginal land can be observed[7]. A reversal of this unequal land distribution and the call for a better access to land for the poor has been on the agenda of political conflict and violence for decades. That is what in Guatemala is known

as "*el clamor por la tierra*"[8] or less passionately "*problema de tierra*". It was one of the main demands of the URNG which has found its expression in the peace accords.

That 'distribution matters' could be learned from Coase (1960) —even for somebody who at the outset would be analytically restricted to just allocative efficiency. Transaction costs of various kinds undermine the quick, exact, and reliable determination of property rights. Hence human interaction and behaviour —like the exchange of goods and the way of resource use or say the acceptance of somebody else's resource use decisions— is less predictable than it would be in an ideal world free of these costs.

The various influential factors for secure title in landed property —which further on will be called "formal title"— can be structured by using a simplistic market model, conceptualising formal title as the result of demand and supply side factors[9]. Figure 1b depicts the demand curve (MV_t) for formal title as its marginal value depending on distance from the market/administrative centre (A). The marginal value can be derived as the difference of the net present value of land with (V_t) and without (V_{nt}) formal title as shown in figure 1a. The main characteristics attributed to formal title are **first** that the state guarantees public adjudication and enforcement of the private claim, thus reducing private exclusion costs. That is what elsewhere[10] has been called the traditional view of "farmers security", i.e. a more secure expectation of a future income stream from the exercise of property rights through freedom from expropriation. **Second**, formal title offers the collateral necessary to access short and long term loans in the formal capital market. Thus, it facilitates "lenders security" and therefore increases investment incentives through lower interest rates[11]. **Third**, formal title widens the market by decreasing information costs for potential buyers outside of the community and law enforcement is ensured independently from local informal arrangements. Hence, potential gains from trade by allocation to higher-potential users can be realised which in turn will be capitalised in the land value.

Figure 1: The market for formal title



Source: Adapted from Alston et al. (1996)

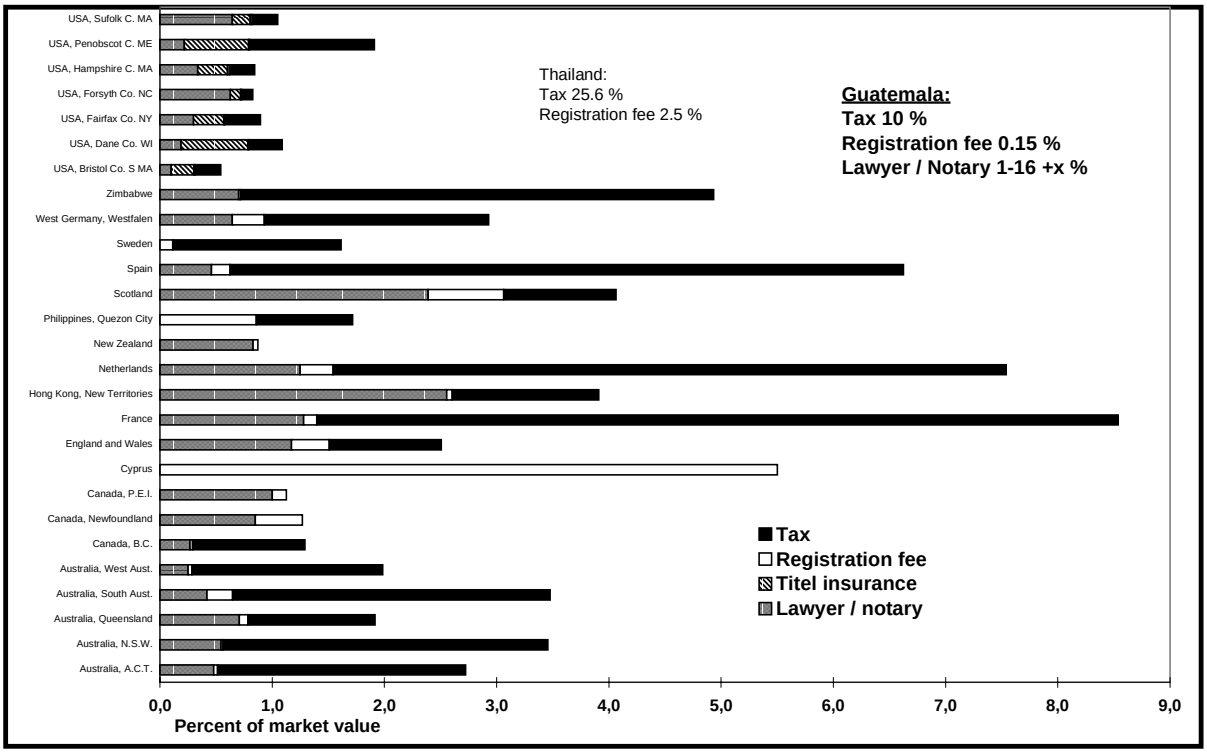
Theoretically it can be expected that the land value difference (C-B) is greatest where infrastructure conditions facilitate access to product (low transportation costs) and factor markets (commercial banks), and where resource competition is high and thus formal law enforcement is very important. This situation is given in the market/administrative centre (A). The demand elasticity of formal title depends on how important formal title remains with increasing distance.

The curve C_t depicts the supply side of title i.e. marginal private costs for obtaining formal title depending on the distance to A. Administrative legal requirements for titling which raise compliance costs, necessary taxes and fees, surveying costs, as well as travelling costs are relevant issues. Even costs of the claimants to organise and lobby government agencies to provide titling services can be captured through C_t (social and private costs would diverge!). As depicted in figure 1b no one would secure his property by formal title right of point E. Whether formal title is of any relevance at all for a land tenure system, and whether the above mentioned advantages attributed to it can be realised, depends on the relative positions of supply and demand; it therefore depends on how the underlying factors move the curves. In referring to this model the Guatemalan situation can be characterised by diverse institutional impediments to secure title. The following ones will be discussed in terms of their effects upon shifting MV_t and C_t.

The Set-up of the Land Title Registry System (RGP)[12]

The inefficient system for documentation of formal title itself affects the demand as well as the supply side. The RGP has been designed by constitution and statute law as a decentralised institution functioning as a Torrens-style title system based on the *folio real*. But over time basic management principles necessary for the effective handling of such a system have been neglected, so that it actually works like a deed system (but without the complementary market for title insurance, which is known from the United States). This implies that in order to get clear title, the interested person or their lawyer has to search the root of title through various registration and annotation deeds, which are distributed amongst various tomes. Such a search can easily take a couple of days. This is made worse by the fact that actually the decentralisation, referred to above, has never been put into effect. There are still only two registries for the whole country, which further increases information costs by the necessary time and travelling expenses. Furthermore, as Guatemala still lacks a consistent country wide cadastre system[13], almost all property entries are without proper land survey information. The system mainly relies on inaccurate “metes and bounds” information. Double entry and overlapping of properties are frequent problems. Even the loss and destruction of registry records has happened over the years[14]. Last but not least cases of fraud and corruption have been reported. In sum, formal title itself as defined by registration in the RGP is an unreliable and difficult to access information; an information which does not rule out future private litigation costs even within the formal title system, i.e. even if everybody would have formally registered his property. This moves down MV_t. In addition to the above mentioned information costs which can be attributed to the inefficient set-up of the RGP, the title claimant —e.g. the buyer of a piece of land— has to cover specific taxes and fees; these costs are (as depicted in figure 2) high compared with other countries. This moves up C_t, whereby cost degression effects work in favour of the registration of larger and/or higher valued properties[15]. In sum, the organisation[16] ”RGP” which is supposed to embody the formal title institution is a costly and not credible one, i.e. has no de facto public faith.

Figure 2: Transaction costs for formal title in international comparison



Source: Miethbauer (1997)

The Law of Prescriptive Acquisition and Supplementary Title

As has been shown elsewhere[17] the legal-administrative procedure for first title registration of the good faith possessor which is applied in Guatemala can be deemed as inefficient. The so-called process of *titulacion supletoria* for the claimant to obtain free title takes about 20 years. The design of the law makes it possible that at least during the first 10 years the claimant is subject to **discretionary ruling** of the responsible governmental agency INTA and the judiciary. This drives up the compliance costs which the applicant has to invest and it delays the suggested positive effects of formal title. The optimal mere number of years necessary for successful prescriptive acquisition —which has been called the **mechanical rule** content of this kind of law[18]— can be modelled as a trade-off between four influential factors: (i) protection and supervision costs of a potential true owner, (ii) hold-up costs of the good faith possessor, (iii) litigation costs and (iv) third party costs (i.e. risks for potential buyers). An important result of the model is that land tenure systems with a less sophisticated title registration system —as it is the case for Guatemala (see above)— should have shorter time requirements for prescription. Actually, in Guatemala this number of years has even been extended in the past by changes in the law. In sum, the costs of obtaining formal title (C_t) have been driven up while its net present value (after discounting to the point in time where the costs arise) has been lowered.

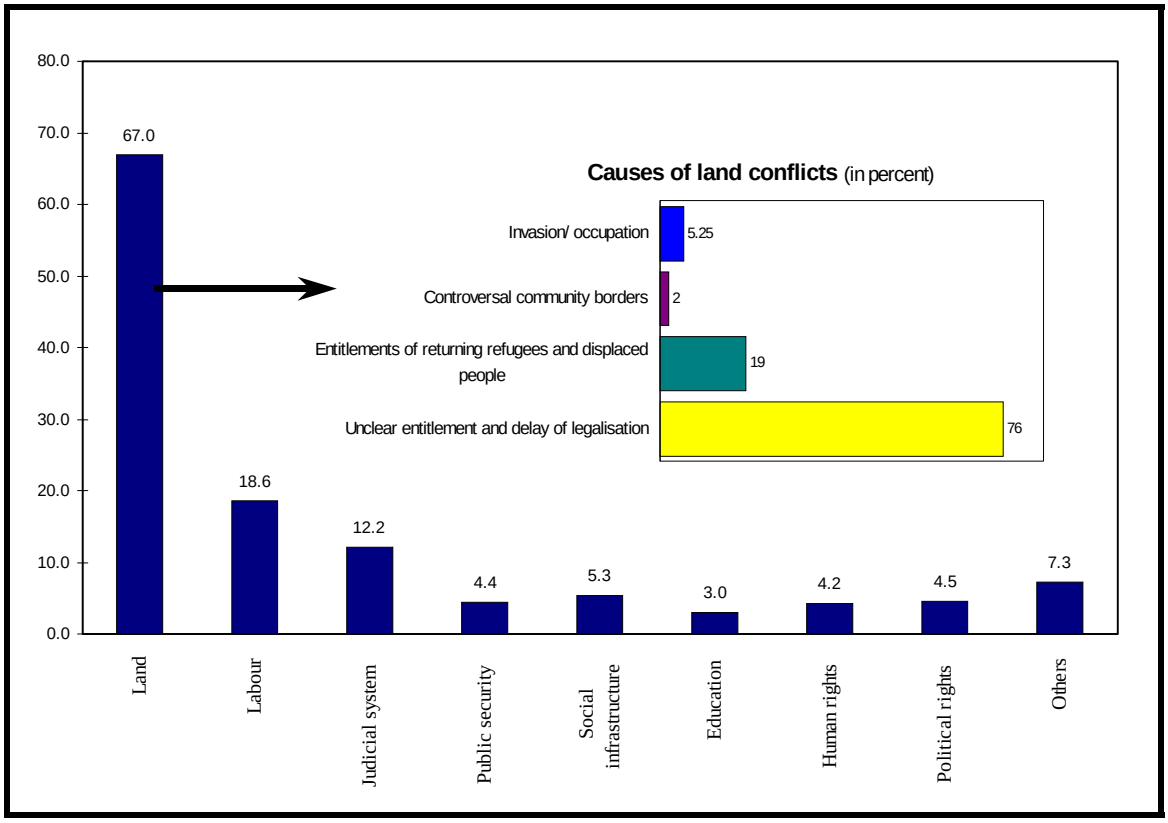
Credit Market Access and the Instability of Macro-economic Policy

As Vogel et al. (1990) and Barham (1996) have shown, the Guatemalan financial sector is affected by certain legal and structural constraints as well as by repercussions of the Central Bank's macro-economic policies (commercial banks' reserve requirements and other monetary and exchange rate stabilisation policies). All these factors lower the allocation of bank credit, especially in rural areas. Even where a land title could be offered as a collateral

credit rationing limits especially small scale producers' access to financial resources at reasonable interest rates. This is also confirmed by the actual publicly discussed severe liquidity problems of commercial banks, supplying loans to coffee producers for the 98/99 harvest[19]. Hence, the conditions of credit access and interest costs are not much better than without formal title, in terms of our model this implies a down move of MV_t.

Uncertainty of Public Law Enforcement and the Pluralism of Land Right Entitlements
The problems of the first two preceding subsections are related to a more fundamental problem of order in the assignment of land rights and a not prevailing rule of law[20]. Land conflicts in Guatemala are an important part of all social conflicts (see figure 3).

Figure 3: Social conflicts in Guatemala by origin (1995/96) (in percent, n = 474)



Source: Own presentation; data from OAE/ PROPAZ (1996)

As the figure depicts, unclear legal recognition of land rights and delay of legalisation is the foremost cause of conflict. This is related **first** to the inefficient work of the above mentioned government agency INTA, which is by special agrarian law[21] in charge of land title legalisation in certain circumstances and geographic areas. This agency is known for corruption, arbitrariness and delay of decisions. **Second**, the tasks of this agency —assigned to it by statute law— and other constitutional law devices have created various land right entitlements which exist simultaneously to formally registered title (itself being a constitutionally guaranteed right, Art. 39, 40). Conflicts arise especially where these entitlements overlap and thus compete with each other and against formal title. Specific individual rights on land and their rank which may result from these entitlements appear to be uncertain. The relevant property right situations, which have to be mentioned in this context are as follows: ***titulo individual:*** the claimant has a private title, formally registered or a document attested by a notary (*escritura publica*) or just a private title deed;

precarista/agarrada: the claimant has invaded public or private land, his situation is precarious but can perhaps be resolved by prescriptive acquisition and *titulacion supletoria*; ***tierras comunales:*** indigenous lands, formally protected by constitutional law (Art. 66, 67, 70) and ILO Convention 169[22], but respective statute law arrangements are missing e.g. corporation of indigenous communities and formal registration of corporate title[23]; ***tierras municipales:*** public lands belonging to the municipalities (regional administrative bodies, 330 for the whole country), of which the majority keep mostly colonial not formally registered titles; a functional overlapping with *tierras comunales* is frequent; ***INTA-tutelaje, parcelario familiar/ parcelario collectivo:*** in a tutelage-like arrangement INTA sells public land to individuals and collectives, and the beneficiaries (*parcelarios*) get registered private or collective title after a period of 10 years (20 years in *Peten* province); the double assignment of rights, which are already privately claimed or even registered, has been repeatedly reported; ***INTA-titulacion supletoria:*** for certain public lands (*tierras baldias*) the state through its agent INTA is in charge of the application of the above mentioned process for prescriptive acquisition; if a claimant wants to legalise his "precarious" situation, he has to comply with INTA´s requirements.

Additionally the **peace accords** by various specific agreements have created new entitlements concerning land rights for specific groups or emphasise already promised ones. The **Accord on Identity and Rights of Indigenous Peoples** intends to affirm the legitimacy of indigenous land rights and calls for restitution measures. The **Accord on Resettlement of People Displaced by the Armed Conflict** wants to establish land access for the internal and external refugees who left their properties in times of the civil war and found their lands occupied upon return. Last but not least the **Accord on Socio-Economic Issues and Agrarian Situation** puts a land bank mechanism on the agenda in order to increase poor rural people's (*campesinos*) access to land. But the problem of these agreements is that their constitutional status is controversial i.e. their function for the consensual assignment of property rights. It is questionable whether and how these agreements obligate or constrain governmental action.

It can be hypothesised that this "pluralism" (Atwood, 1990) of land right institutions (i.e. constitutional, quasi-constitutional and statute law rules) which constitute competing uncertain entitlements for different claimants is reflected in the way the state acts as the enforcer of law. Actually, formal title is no more enforced like prevailing formal law would prescribe actions, e.g. in the case of land invasions/occupations. According to a recent change in law, land invasions nowadays in Guatemala establish a public tort[24] which immediately has to be dealt with by the public police forces. The land owner, legitimised by formal title, ought not to be pressed to incur private law enforcement costs. But, as a continuation of formerly prevailing legislation, land owners still have to invest in own efforts and recourse to legal action e.g. employing a lawyer to obtain a judicial eviction order. Various cases have been reported[25] where only the inquiries and the adjudication process of the responsible Ministry (*Ministerio Publico*) and the judicial system have caused a delay of a couple of months; and more than a year in some cases elapsed until the actual enforcement of the eviction order. Apart from private enforcement costs, the land owner is incurring opportunity costs for the non-use of his property during the time of occupation, which can easily arise to substantial amounts.

Referring to the above depicted market model, the delay or even absence of public enforcement of formal title rights lowers V_t for the individual title holder. But it has further negative external effects. External rules —like public tort law—are useless without obligatory sanctions. When sanctions are no longer applied institutions lapse[26]. External rule making responds to the requirement that **justice must not only be done but must be seen to be done**

in order to have a normative influence on behaviour. Thus enforcement itself is a public good, non-enforcement is a public bad[27]. The establishment of law can be understood as an investment process, thus —by keeping this analogy— non-enforcement parallels erosion and consumption of the public capital stock, which can only be rebuilt after a much longer time than consumption has taken. If rules are decreed and/or enforced casewise they cannot be comprehended by the ruled people as integral to a system of mutually compatible rules i.e. as an order. There is a danger of inconsistency, arbitrariness and randomness. These rules are ineffectual in norming individual behaviour, thus ineffectual as institutions. They disorientate people and create disorder. Thus, rule abiding on behalf of the state as the responsible enforcement agent is important for the rule compliance in the society. Inaction or delay e.g. in case of invasions/occupations of land provokes further infringements of the law and makes rights to be probabilistic ones. To keep our model, it drives down V_t for everybody.

The need for fundamental reform in Guatemala's judicial system[28]. aggravates the above depicted situation. Accessibility, especially in rural areas, is very low or even non-existent[29]. Cases of mass affective action like mob rule and especially lynching have increasingly been reported during the last years[30]. This by itself confirms the lack of order. Public credibility of the judiciary as revealed in various polls is among the worst of all public organisations[31]. Widespread corruption and the lack of a professional bureaucracy is a well known problem. Adjudication, especially in land rights issues, is hampered by the absence of a specific agrarian jurisdiction.

The question arises, whether secure title to landed property and the rule of law in Guatemala would be achieved through improved functioning of the existing rules —i.e. improved enforcement even if much more resources will have to be spent for it, a technically more efficient RGP, a more reliable judicial system, a more efficient credit market and so on. Is it just a problem of credibility? It will be argued here that credibility of rules is important, but that the perspective of analysis has to be extended to the underlying processes of rule building, hence extended to the question of legitimacy. Thereby, especially the role of the state in terms of determination of property rights can be more easily understood. To capture this legitimacy aspect of property rights a contractarian model from Buchanan (1975) will briefly be sketched and further on serve as a reference.

III. Legitimacy of rights from implicit constitutional contract

Constitutional Contract and the Protective State

The contractarian concept[32] tries to locate legitimacy in implicit contract. It is a conceptual explanation of how social order emerges contractually from rational utility maximisation of individuals, social order that would embody an assignment of rights and a political structure charged with enforcing rules with respect to these rights. Based on Hobbes, Buchanan (1975) takes the "natural distribution" (ND) —that is what would be called the hobbesian jungle or anarchistic equilibrium— as a conceptual starting point for initiating a meaningful contract on the assignment of initial rights. This is modelled as a natural equilibrium among unequal individuals which undertake direct production activities as well as "predation and defence" (p&d) efforts (e.g. land invasion; protection, enforcement). The constitutional contract can be reached by a pareto-efficient agreement on the voluntary assignment of rights and reduction of the aforementioned efforts (theoretically a move along the contract curve). Hence, social order evolves out of an implicit disarmament contract, economising on p&d costs. Thereby it is important to recognise that the "direct production point" (DP) is not necessarily within the realm of solutions, i.e. certain private p&d efforts may be part of the constitutional contract and DP may not be pareto-superior to ND.

If this model is extended to n individuals, the process of constitutional contract is affected by the typical co-ordination problem as depicted in the n-person prisoner's dilemma. As rule compliance is in the short run not individually rational, an external enforcement agent is necessary in order to protect the agreed on rights. This agent is what is called the **protective state**, emerging out of the constitutional contract and only empowered to enforce already existing rights. In this sense, ideally, the state acts like a referee in a pure scientific way, according to existing rules, not involved in the assignment of rights[33]. The protective state of course has to be equipped with the necessary budget resources, which have to be the lower, the higher voluntary rule compliance is, i.e. compliance independent of the degree of enforcement and punishment; and the better rights are specified and the according rules are defined the easier/cheaper is the scientific task of adjudication.

Post-Constitutional Contract and the Productive State

Starting from this constitutional contract, individuals can further get engaged in bilateral market exchange of their assigned rights in order to realise further gains from trade. But due to demand for public goods and further statute law legislation there is further need for collective action. Therefore, post-constitutional contracting is necessary and collective decision making rules have to be agreed on. Participation in post-constitutional contracts — e.g. voting— is part of the rights assigned at the constitutional level. This process of defining collective rules results in a definition of what can be called **productive state**. It has to be defined of what it is empowered to do and how it is supposed to act, if it acts in its capacity as the productive state.

Participation and Probabilistic Rights

If the mutually agreed constitutional rights are changed by claims put on them ex post and enforced by the state, or if these rights are not verified by respective statute law, contradictions to individual ex ante calculations may occur. These encroachments on the constitutional domain reduce the legitimacy of rights because these rights are probabilistic and are thus as if they have never really been assigned. Deviation from unanimity rule[34] in post-constitutional contracting (collective action) and the discretionary limits in adjudication by the protective state are potential sources for this problem. Therefore participation rights — e.g. embodied in the electoral system, the degree of political federalism and what Campos/Nugent (1999) called "strength of civil society"— are important for the security of legitimate rights.

Participation and Dynamic Change of Rights

The introduced contractarian model analyses an existing system of political and economical rules as if it could be the result of an implicit contract. Therefore it assumes that the natural distribution in anarchistic equilibrium always exists "underneath" the observed realities. This implies that especially groups with similar right endowments develop their re-negotiation expectations, i.e. how their position would be out of a new contract. It can be derived that the lower participation in the past —when a constitution actually has been built— and in present rule building was, the greater the possibility of a "distance"[35] between (maybe not verifiable, because of missing political participation) expectations and the actual structure of rights. This in turn reduces legitimacy of the actual structure and thus lowers voluntary rule compliance, which induces higher costs for the protective state. The state might no more be able nor willing to enforce the actual structure of rights. This creates the pressure towards a change of rights. The question and challenge then is how to ensure a legitimate and reliable structure of rights over time without the above discussed encroachments.

IV. Constitutional Re-Negotiation: Legitimacy and Credibility of Rules in Guatemala

Credibility: The Guatemalan State, Experiences of the Past, and Probabilistic Rights

During the last decades public policy was determined by the military. Especially for the rural population the so-called counter-insurgency strategy implied an involvement of the armed forces into all spheres of life. Human rights violations abounded. Systematic assassinations have been determined as genocide by the UN-Truth-Commission[36] Senior military officials have been legalising vast tracks of land for themselves. The political system, i.e. the parliament and the political parties were not participating in political decision making, especially leftist parties were oppressed[37]. The jurisdiction has been heavily interfered with by the armed forces. In sum, constitutionally affirmed rights were not secured and, indeed, were heavily violated.

Even after the beginning of a formal democratisation[38] process and the end of the armed conflict, credibility of democratic institutions is low, as revealed by public polls and low electoral participation[39]. But the signing of the peace accords has been accompanied by an increasing political mobilisation of hitherto oppressed groups and a strengthening of the civil society[40]. On the one hand this widens the participatory spaces to articulate hitherto oppressed claims. On the other hand it forces the state to exactly distinguish between its empowerment as the protective and productive one and to channel emerging conflicts in separate ways. For instance, in situations of organised land invasions/occupations it needs a credible state to deal with the right of the formal title owner to enforcement and at the same time to handle the claims of an increasing number of people arguing that they are poor and in need of a place where to secure their livelihood. The question is, who is empowered to re-negotiate and in which institutional framework is this going to happen?

Legitimacy: the Status of the Peace Accords and Constitutional Rights

In referring to the contractarian model, it is argued here that for rules and the resulting decisions to be credible they have to be based on legitimate rule building processes, i.e. as-if-contracts. So far the peace negotiations can be understood as the beginning of a constitutional re-negotiation process. But lack of transparency and publicity, as well as limited participation has been held against the negotiations by certain social players[41]. Therefore it is disputable, whether quasi-constitutional status can be attributed to the accords. Furthermore, the recent **referendum** in May 1999 about certain changes in the existing Constitution of Guatemala, which were asked for in the peace accords, **failed**. Changes have been rejected by a narrow majority. But the voting suffered from the same deficiency as others before: a very low electoral participation (18.5 percent). Thus a huge part of the population voluntarily (or forced by high voting costs[42]) stayed out of the co-ordination process for social order. The still unknown claims might result in a continuation of re-negotiation and conflict. This is, furthermore, suggested by the polarised voting result of the referendum (see table 1).

Table 1: Social deprivation and voting

1a	GDP per capita ppp US$ (A)	IEDS (B)	Share of indigenous population % (C)	Referendum Theme 1 Approval % (D)
Guatemala, total	**3518,0**	**27,20**	**41,70**	**43,27**
Provinces				
El Progreso	2015,6	23,87	2,10	31,41
Santa Rosa	1360,9	25,63	2,60	33,85
Zacapa	2158,2	25,16	4,40	30,19
Jutiapa	1054,1	28,09	5,10	39,66
Escuintla	918,2	23,84	6,40	37,80
Guatemala Prov.	6159,8	12,66	12,30	27,00
Izabal	1579,4	28,43	22,80	45,33
El Petén	1322,0	33,51	26,20	72,08
Chiquimula	1518,6	31,17	29,50	41,84
Retalhuleu	1987,3	26,84	33,30	40,26
Jalapa	1305,3	32,21	37,40	47,93
Sacatepéquez	1602,2	18,58	41,60	32,88
San Marcos	486,3	32,21	42,50	49,78
Baja Verapaz	1340,4	36,17	55,50	50,80
Suchitepéquez	1039,2	29,63	57,40	38,65
Quetzaltenango	1072,1	24,61	59,60	42,44
Huehuetenango	536,4	39,47	63,80	58,16
Chimaltenango	717,8	30,11	77,70	53,05
El Quiché	526,0	45,59	83,40	62,22
Alta Verapaz	510,5	48,40	89,00	64,75
Sololá	926,2	40,41	93,60	69,21
Totonicapán	737,9	37,84	94,50	59,53

Sources: (A): UN (1998:209) = 1995/96; purchasing power parity GDP
(B): UN (1998:200) = 1994/95; Index of social deprivation
(C): UN (1998:220) = 1994 (D): TSE (1999)
own calculations

Note: 7 Provinces of highest IEDS
7 Provinces of medium IEDS
7 Provinces of low IEDS

1b: Selected Spearman's rank correlation coefficients

	1yes	4yes	INDIGEN	IEDS
HDI	-0,7741	-0,7753		
IEDS	0,9012	0,9136	0,7058	
GDP	-0,6894	-0,6849	-0,6883	0,6866

	1yes	2yes	3yes	4yes
INDIGEN	0,7414	0,642	0,6465	0,7301

Note: Significance, all 99.9 percent level
HDI = Human Development Index INDIGEN = Share of indigenous population
IEDS = Index of Social Deprivation GDP = Gross Domestic Product
yes = Approval of referendum theme

The referendum themes 1 and 4 concerned fundamental interests of the indigenous people (around 40 percent of the population). Theme 1 basically asked if by constitution Guatemala is to be characterised as a **pluricultural, multiethnical and multilingual nation**. This generally implies that the state, in its dual function as a protective and productive one, would have to recognise that actually there are various ethnic groups living in the country, speaking different languages (24), having different rule systems, different values, thus different cultures. Recognition of this characterisation of the nation would e.g. obligate the state to offer (by region) bilingual education, a bilingual and oral judicial system and bilingual public administration —all relevant in cases of land legalisation and litigation of conflicts when indigenous farmers are involved. Theme 4 dealt, among other things, with the recognition by the existing judicial system of traditional indigenous litigation rules (*ley consuetudinario*)[43] and their specific ways of applying law. Besides this, the referendum intended to assign to

traditional (indigenous) district authorities a higher degree of autonomy or at least rights of veto concerning state policies, i.e. specific post-constitutional participation rights.

As can be seen from table 1a the voting results clearly reflect Guatemalan reality of disparities and social deprivation —especially of indigenous people. The provinces of highest values for the IEDS-Index[44] (shaded black and dark grey) are the ones where theme 1 has been approved (shaded black) ("1yes") (see table 1b for the Spearman's rank correlation coefficient: 0.9012). These are the provinces with the highest share of indigenous population, as the coefficient in table 1b further reveals (0.7058). The different coefficients of correlation between "share of indigenous population" (INDIGEN) and degree of approval for the different referendum themes (see table 1b, bottom) confirm the above depicted ethnicity problem as part of constitutional (social) order in Guatemala.

Pareto-Superior Redistribution and New Entitlements

It is always possible that in order to settle an agreement direct resource transfers have to be part of the constitutional contract, i.e. transfers in addition to just the mutual assignment of rights referring to what has been called direct production (see above). As has been shown by Tullock (1972) this can be a pareto-superior redistribution in comparison to the anarchistic equilibrium. For instance a constitutionally agreed increase of public spending on (bilingual) education and health services, financed by taxes, can be interpreted as a transfer in this sense. It represents an additional entitlement to future goods and services and a claim on income (property) rights of others. In theme 1 of the mentioned referendum an assignment of budget resources to public education of at least 2.5 percent of GDP has been asked for as part of a constitutional re-negotiation. This can be understood as an integral part of an anti-poverty strategy, taken into consideration that Guatemala is not only characterised by a high concentration of land ownership but also by a low standard of public social services, accompanied by a very screwed income distribution and extended poverty (see chapter II)[45].

The fact that these new entitlements have not been agreed on by the referendum means that interested groups will organise for further collective action in order to obtain their objectives by post-constitutional contracting, i.e. by means of ordinary statute law legislation and executive action of the government. But this suggests —by referring to what has been explained above— that, **first,** specific rights e.g. for the poor are insecure because of dependency on parliamentary majorities and governmental ruling, **second,** these rights are **not** an integral part of constitutional rights assigned jointly e.g. with land rights, **third**, that the encroachment problem and social conflicts continue. A continuing adaptation strategy e.g. of large landowners will be the employment of private security forces and income tax evasion.

V. Summary and Conclusions

In this paper it has been argued that the assignment and security of landed property rights have to be understood as an integral part of a constitutional mix of rights. The problems of extended poverty and conflicts, concentration of landholdings and allocative inefficiency of land use have been set in a wider analytical framework of legitimate social order.

As has been explained in section II, registered and publicly enforced title ("formal title") is supposed to have specific advantages which in sum promote an efficient resource allocation through a functioning land market. But in Guatemala there are certain institutional deficiencies which negatively affect the credibility and function of formal title, thus calling for reforms. The set-up of the land registry system, the law of prescriptive acquisition and problems of credit market access have been mentioned in this context. Additionally, a weak judicial system, disordered legislation and other rule building as well as apparent arbitrariness

of public enforcement of rights have created uncertainty about the rank of different entitlements concerning land rights ("institutional pluralism"). The peace accords have further added to this problem.

But nevertheless the peace talks and the final accords are important by imposing the conclusion that the acceptance of rights, thus voluntary rule compliance and social order are strongly related to the underlying process of assignment of rights and rule building. This issue of credibility **and** legitimicy has been discussed in an constitution-economic framework, emphasising the importance of political (participation) rights and of what has been called "strength of civil society". It can be derived that the ongoing process of democratisation and political mobilisation, especially in rural areas, will have repercussions on the implementation and feasibility of (rule changing) reform policies, e.g. the introduction of a cadastre system and individualisation of land titles. Also it has been shown that the functioning of land tenure institutions as effective rules —ordering transactions in a reliable way and economising on costs— is in Guatemala related to an ethnicity problem. If participation rights for indigenous people are constrained already by the very design of the institutions —e.g. because of language and educational problems in cases of litigation and title adjudication— then the legitimacy of rules is questionable. Hence, the polarised results of the constitutional referendum, which have been discussed, reveal an unresolved problem of nation building affecting social order and maintaining the threat of violent conflict.

References

Alston, L.J., Libecap, G.D., Schneider, R., (1996). Violence and the assignment of property rights on two Brazilian frontiers. In: M.R. Garfinkel (ed.), The political economy of conflict and appropriation. Cambridge, MA., pp. 157-177.

Alchian, A., Demsetz, H., (1973). The property right paradigm. Journal of Economic History 33(1), pp. 16-27.

Archbishopric Guatemala (1988). *El clamor por la tierra*. Archiepiscopal pastoral. Guatemala Cd.

Atwood, D.A., (1990). Land registration in Africa: the impact on agricultural production. World Development 18(5), pp. 659-671.

Barham, B.L., Boucher, S., Carter, M.R., (1996). Credit constraints, credit unions, and small-scale producers in Guatemala. World development 24(5), pp. 793-806.

Besley, T.,(1995). Property rights and investment incentives: theory and evidence from Ghana. Journal of Political Economy, 103(5), pp. 903-937.
Borge & Asociados (1999). Results of public opinion poll. Guatemala City, PRENSA LIBRE, 6-18-99.

Brunetti, A., Kisunko, G., Weder, B., (1997). Credibility of rules and economic growth. Policy Research Paper 1760. Washington DC, The World Bank.

Buchanan, J., (1975). The limits of liberty. Chicago/London, University of Chicago Press.

Campus, N.F., Nugent, J.B., (1999). Development performance and the institutions of governance: evidence from East Asia and Latin America. World Development 27(3), pp. 439-452.

Cassel, D.,(1988). Wirtschaftspolitik als Ordnungspolitik. In: D. Cassel, B.-T. Ramb, H.J. Thieme (eds.), Ordnungspolitik. Munich, Vahlen, pp. 313-333.

CEH (1999). *Guatemala: memoria del silencio*. Guatemala City/ NY, United Nations, *Comisión para el Esclarecimiento Histórico*.

Cerdas Cruz, R.,(1996). Political parties and party system. In: R. Sieder (ed.), Central America: fragile transition. NY/ London, Institute of Latin American Studies Series, pp. 15-54.

Coase, R., (1960). The Problem of Social Cost. Journal of Law and Economics 3, pp. 1-44.

Coleman, J.S., (1990). Foundations of social theory. Cambridge, MA., Harvard University Press.

Comisión de Fortalecimiento de la Justicia (1998). *Una nueva justicia para la paz*. Executive summary of the commission's report. Guatemala Cd., Magna Terra.

Demsetz, H., (1967). Towards a theory of property rights. American Economic Review 57(2), pp. 347-359.

Eucken, W.,(1952). Grundsätze der Wirtschaftspolitik. Tübingen, Mohr.

Fingleton, J.S., (1998). Legal recognition of indigenous groups. FAO Legal Papers Online.

Fundación Myrna Mack (1997). *Los dilemas de la reforma judicial*. Bulletin, 12-7-97. Guatemala Cd.

Hernández Alarcón, R.,(1998). *A quién servirá el catastro?* Guatemala Cd., Inforpress Centroamerica.

Hobbes, T., (1881). Leviathan. Oxford, James Thornton.

IDEA (1997). Global report on political participation. Stockholm, International Institute for Democracy and Electoral Assistance.

Jonas, S., (1998). Democratization of Guatemala through the peace process. University of Calefornia. Online paper: www.jhu.edu/~soc/.ladark/guatconf/jonas.htm, March 24, 1998.

Kasper, W., Streit, M.E., (1999). Institutional economics. Cheltenham/ Northhampton, Edward Elgar.

Leipold, H., (1994). Interdependenz von wirtschaftlicher und politischer Ordnung. In: C. Herrmann-Pillath, O. Schlecht, H.F. Wünsche (eds.). Marktwirtschaft als Aufgabe. Stuttgart/ Jena/ NY, pp.723-738.

Merrill, T., (1986). Property rules, liability rules, and adverse possession. Northwestern University Law Review 79, pp.1122-1154.

Miethbauer, T., (1995). Presentation about „Market oriented land reform in Guatemala". Kiel, Institute of Agricultural Economics Staff Seminar, February 6, 1995.

Miethbauer, T., (1997). Institutionelle Rahmenbedingungen der formalen Bodeneigentumssicherung in Guatemala. Manuscript. Kiel, Institute of Agricultural Economics Staff Seminar, November 24, 1997.

Miethbauer, T., (1998). *Titulación Supletoria*: archaisches Hemnis oder effizientes Regelwerk? Eine ökonomische Analyse des Ersitzungsrechtes. Manuscript . Kiel, Institute of Agricultural Economics Staff Seminar, November 20, 1998.

North, D.C., (1990). Institutions, institutional change and economic performance. Cambridge University Press.

OAE/PROPAZ (1996). *Diagnóstico de conflictividad*. Guatemala Cd., Organisation of American States.

Polinsky, A.M., Shavell, S., (1998). The economic theory of public enforcement of law. Cambridge, MA., Discussion paper series, John M. Olin Center for Law, Economics, and Business, Harvard Law School, 235.

Pomeri, R.G., (1993). Guatemala Länderprofil. Guatemala Cd., GTZ/ SEGEPLAN.

Rawls, J., (1971). A theory of justice. Cambridge, MA.

Schweigert, T.E., (1993). Commercial sector wages and subsistence sector labor productivity in Guatemalan agriculture. World Development 21(1), pp. 81-91.

Schubert, K.,(1998). Theorien des Gesellschaftsvertrages und ihre ordnungspolitischen Implikationen. Cologne, Institute of Economic Policy.

Sieder, R., (1996). *Derecho consuetudinario y transición democrática en Guatemala*. Guatemala, FLACSO.

TSE (1999). Online information (data by email) submitted by the *Tribunal Suprema Electoral*. Guatemala.

Tyler, J., El-Ghonemy, R. und Couvreur, Y. (1993). Alleviating rural poverty through agricultural growth. Journal of Development Studies 29, pp. 358-364.

Tullock, G., (1972). Explorations in the theory of anarchy. Blacksburg, Center for Study of Public Choice.

UN (1990, 1993, 1999). Human development report. NY/ Oxford, United Nations.

UN (1998). *Guatemala: los contrastes del desarollo humano*. Online document: www.onu.org.gt/contrastes, August 8, 1999. Guatemala City, United Nations.

UN (1997). *La conciliacion en la solucion de conflictos en la administracion de justicia en los pueblos indigenas. Workshop Documentation*, July 2-3, 1997. Guatemala Cd., United Nations.

Vogel, R.C., Christen, R.P., McGuire, J., Protasi, J.C., Slas, A.M., Saperstein, M., (1990). An assessment of rural financial markets in Guatemala. Consultant report for USAID. Key Biscayne/ Arlington, Inter-American Management Consulting Corporation.

Worldbank (1995). Guatemala. An assessment of poverty. Report 12313-GU. Washington DC, The World Bank.

Endnotes

1 Hobbes (1881:94).
2 Rawls (1971) developed his model as a contract among equals, putting them behind a "veil of ignorance".
3 For the concept of hierarchy of rules and definitions of various types of rules see Kasper/ Streit (1999).
4 On Guatemala see Worldbank (1995), for international comparisons see Tyler et al. (1993) and UN (1993:29).
5 For the development of factor rent shares see Miethbauer (1995). Schweigert (1993) proved the surplus labor model for Guatemala and thus a long term stagnant low labor income in agriculture. Income disparity, measured as the average-income ratio of the highest and lowest deciles, is the second highest in the world: 30.0; only Brazil reveals 32.1. See UN (1999:147). Tax revenues (tax as % of GDP) are among the lowest in the world: 9.1 percent (1997), see SIGLO XXI, 2-7-1998 ("Carga tributaria llegó a 9.1 sobre PIB") and UN (1999:186).
6 According to Worldbank (1995), 57.9 / 75.2 percent of the population live in extreme poverty/ poverty, respectively. Other sources reveal respective data for 1980 as 33 / 65 percent, see Pomeri (1993:23).
7 See UN (1998), chapter 4 on natural resources.
8 English: „the cry for land", title of a archiepiscopal pastoral, see Archbishopric Guatemala (1988).
9 This framework has been applied by Alston et al. (1996).
10 See Besley (1995), Demsetz (1967), Alchian/Demsetz (1973).
11 ...which influence in an exponential way the calculation of the net present value of land.
12 *Registro General de la Propiedad*, in Guatemala City and Quetzaltenango.
13 There are different pilot projects on cadastral mapping in five provinces, financed by bilateral donors and the Worldbank, which are supposed to be co-ordinated by a technical unit (UTJ) attached to a national commission on land issues (PROTIERRA). See Hernández Alarcón (1998).
14 There is an ongoing project, financed by the Worldbank, on reconstruction of the RGP. Until October 1999 this has comprised mainly the save storage of all registry records on optical disks (personal information by J. Rolando Barrios, head of the RGP in Guatemala City. September 1999).
15 See Miethbauer (1997).
16 North (1990) defines organisations as institutions, i.e. rule systems, **plus** people and their specific behaviour.
17 See Miethbauer (1998).
18 See Merrill (1986).
19 See e.g. De Leon, G. (Federation of Agricultural Cooperatives), R. Villanueva (president of the business umbrella organisation CACIF), Velasquez, E. (president of the Central Bank), Guitierrez, R. (Superintendence of Banks), Chocano, M. (economic research institute CIEN) in PRENSA LIBRE (4-6, 7-13, 7-22, 1999).
20 For a short overview of the concept of „the rule of law" see Kasper/Streit (1999:167).
21 *Decreto 1551, Ley de Transformación Agraria* (1962). According to the just approved (5-13-99) law of Permanent Land Fund (FONTIERRA), INTA is to be dissolved after a period of 3 years and many of its functions transferred to FONTIERRA.
22 Approved by the Guatemalan parliament in March 1996 and to take effect since June 1997.
23 See Fingleton (1998) for a theory of such a law.
24 Decreto 33-96, §7, (1996), declares the usurpation of land a "*delito flagrante*", reforming §256, Penal Code.
25 The newspapers frequently report about this, e.g. SIGLO XXI, 3-27-99 ("*Piden desalojo de finca*"): 6 years of occupation; La Hora, 4-10-99 ("*MP anuncia desalojo de fincas en Mazatenango*"): 3 years of occupation.
26 See Kasper/Streit (1999).
27 See Buchanan (1975), Polinsky/Shavell (1998).
28 For the proposals of a special reform commission see Comisión de Fortalecimiento de la Justicia (1998).
29 139 of the 330 municipalities have no justice of the peace (JP), disputes have to be settled in the respective province capital.
30 See e.g. a press release of the United Nations Verification Mission. In 1998 73 cases have been reported, where 50 persons were executed (PRENSA LIBRE, 1-28-99: "*Aumentan los linchamientos*").
31 See note 39.
32 For a discussion of different theories of social contract see Schubert (1998).
33 As Buchanan (1975:96) nicely puts it: "The baseball referee does not arbitrarily assign free throws to the shorter players".
34 Or, as a softer condition, a further deviation from unanimity rule than it has been given already at the constitutional level.
35 See Buchanan (1975:76).
36 See CEH (1999).
37 For a closer analysis of the Guatemalan political and party system see Cerdas Cruz (1996).
38 ...which started around 1984/85 with new institutions like the Constitutional Court, Supreme Electoral Tribunal, and a Human Rights Ombudsman.

39 For public poll results concerning the credibility of the parliament, political parties, government and judiciary see UN (1998:129); Borge & Asociados (1999); Fundación Myrna Mack (1997); Cerdas Cruz (1996:41,44); e.g. in June 1999 the functioning of the parliament and the political parties were rated as credible by only 11.6 and 9.8 percent of persons asked; in comparison to this the "church" and "press" got a score of 64.9 and 65.6 percent. The average electoral participation in the 1990 decade has been just 29.6 percent, the lowest of all Latin American countries (see IDEA 1997).

40 There is especially to mention the increasing activity of the small farmers'/farm labourers' and indigenous people organisations CONIC and COPMAGUA; an important role for the strengthening of the democratisation process has been attributed to the umbrella organisation ASC, which unites almost a hundred smaller organised social groups and has been accompanying the peace talks by consented political proposals, see Jonas (1998).

41 For instance CONAGRO (a national landowner association) and CIEN, partially financed by CACIF. For their respective positions see SIGLO XXI, 12-2-99, and PRENSA LIBRE, 7-7-99.

42 Voters have to travel to the ballot box in the municipal capitals. The Electoral Law is currently reformed.

43 For an analysis of indigenous law see Sieder (1996) and UN (1997).

44 For the concept and calculation of this index see UN (1999:163).

45 Guatemala has educational indicators which are the worst (by exception of Haiti) in Latin America, and public spending on education is around only 1.7 percent of GNP (average of All Developing Countries: 3.6 percent) (see UN 1999:178); this is also reflected by the value which Guatemala reveals for the UN-Indicator "Real GDP per capita rank minus HDI rank": -32 (UN 1999:136). Only seven other countries in the world show a higher degree of developmental disparity, i.e. a higher indicator value, three of them (Botswana, Gabon, Guinea) with a lower level of „human development"(HDI) than Guatemala.