Deviant Legality

When the Internationalization of the Law Violates Social Norms

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As a trained economist, my academic motivation is to shed light on how individual behavior can be effectively framed in order to realize certain desired results. Law and Economics principally suggests a bundle different approaches on how the law affects individual behavior. Conventionally the law is designed to have the means to effectively sanction behavior, making this behavior ultimately less attractive (Becker 1968, Posner 1985, 1998). But the law might have only the de jure power to sanction if the enforcement agencies cannot reach or even identify violators. Lastly, soft law has no power to sanction agents. The law has no "teeth" whatsoever, if it merely proposes a certain behavior (Goldsmith and Posner 1998, 1999; see also Chayes and Chayes 1993). Problems of enforcement are particularly interesting in the realm of international law. In an increasingly interrelated and interdependent world, legal issues globalize as well. However, states interact based on the principle of sovereignty and central institutions do not have the capacity, competence, and power to sanction behavior when it comes to international law. Thus, what framework is best suited to guarantee a particular social order?

Social organization follows a certain code. If not enforced by law, then this code is determined through informal norms (Ellickson 1998, 2001). In some cases, these informal norms harmonize with the formal law, in other cases they deviate. Depending on the degree of deviance, the law can either serve as a focal point to which individuals converge (Cooter 1998, McAdams 2000) or it can be regarded as illegitimate provocation and trigger more deviance (Parisi and von Wangenheim 2006, Bowles 2009, Carbonara et al. 2012). In a sociological context, actions or behaviors violating social norms are regarded as deviant (Douglas and Waksler 1980, Macionis and Gerber 1999: 191-201). However, this can hold also for international law. Consequently, this cumulative thesis "Deviant Legality – When the Internationalization of the Law Violates Social Norms" investigates the interplay between social norms and the international legal framework applying the methodologies of institutional and behavioral economics. My contribution integrates sociopsychological and sociological findings and understanding about social norms into economic thinking and regulatory implications on an international level. Special focus is laid on cases in which the law does not harmonize with the way in which individuals act or interact with each other customarily, i.e. deviates from their social norms.

My thesis is composed of four independent articles. They scrutinize different platforms

for social norms within different groups of actors. In all four areas, international law plays an essential role but falls short to achieve its goals laid down in legal code. The recurrent theme of the articles is that social norms have to be respected for functioning social organization. Legislators are advised to work with persisting social norms and not against them. The articles investigate the following questions:

- 1. Why do the dominant players in the music market, a market fundamentally affected by technological change, fight a war on file sharing rather than to innovate outdated business models?
- 2. Does the global war on terror effectively deter or perversely provoke more terrorist activity, probably the greatest threat to the stability of the modern world?
- 3. Do international investors follow ethical criteria when they acquire agricultural land in developing countries on a large scale, hereby fulfilling the enormous potential to improve the devastating conditions in the poor host countries?
- 4. What determines the elections of non-permanent members into the United Nations Security Council, the United Nation's most powerful organ?

"Power Over Content – The Real Rationale Behind The War On International Music File Sharing" investigates why those few players that are dominating the music market (majors) are fighting a war on file sharing instead of innovating their business models.

Technological progress made online sharing of copyrighted music possible in the late 1990s. Since the 2000s, this international phenomenon has become widespread especially in the younger generation. File sharers are heterogeneous individuals or loose groups mainly knowing each other only in the virtuality of the Internet.

While the majors ignored technological change and did not serve the new demand for digitized music, tech-savvy individuals and private businesses developed a sophisticated file sharing infrastructure. In response to this, the majors entered into a legal war on file sharing. This article shows that the war cannot be won technically. Instead it might trigger perverse effects in the form of bad press shedding an unfavorable light on the music industry, more popularity for file sharing, improve file sharers' capability in hiding their activity, and in fact enhance means of file sharing. However, innovative models of music distribution would provide a higher usability of music consumption and discovery and thus outperform illegal file sharing. Whereas domination of hits homogenized the music market, matching niche music and demand would make the market more diverse and improve consumer welfare.

This raises the question of why the war is fought after all. A heuristic inquiry of the economic incentives and the political economy in the music market, following the critiques of Lessig (2005) and Anderson (2006), argues that the real rationale behind the war on file sharing is to preserve the power over content of those major corporations dominating the music market. It is not about music or artists itself. Implementing new models of distribution would mean to give up marketing control over content and losing the dominant economic position in the music market.

However, if the war on file sharing succeeds, this will not only result in a welfare inferior situation to the disadvantage of the consumer and many, especially new, musicians. The war ultimately also threatens online privacy and the integrity of the Internet as such. That said, while international legislation should forward welfare increasing innovation, the lobbying power of big music corporations might forward the exact opposite.

The article was accepted for the 2013 International Conference on Control, Decision and Information Technologies and has been presented in an internal workshop.

The joint project with Martin Leroch "When Harsh Policies Backfire – Identity Economics and International Terrorism" aims at better understanding the functioning of international terrorist organizations in response to counterterrorist actions by the international community.

Defining terrorists as outlaws, the international community aims at deterring terrorist activity through harsh sanctions (Ruby 2002, Tilly 2004). However, concentrating on the contemporary global war on terror initiated by the USA and the UK, we find case evidence that this approach backfires. Even though Al-Quaeda and related terrorist organizations suffer under international counterterrorism, terrorist groups now enjoy higher social support especially in Muslim countries and increasingly recruits new members. Terrorists are not deterred but provoked to more terrorist activity.

In a formal economic model relying on identity economics (Akerlof and Kranton 2000, 2010), we argue that the counterterrorist measures infringe the affected peoples' identity, i.e. their perception of themselves. The tough sanctions are regarded as illegitimate not only by the terrorists but also by the local population in those countries targeted by international counterterrorism.

We conclude that counterterrorism has to target precisely and exclusively on the terrorists, separating them from the rest of the world society. Once counterterrorism exceeds clear boundaries, it provokes social support for terrorist groups, ultimately strengthening these groups. A more integrative approach to terrorism would be more effective, i.e. accomplish the objective to reduce terrorist activity more quickly and in a sustained

manner. It would also do this more efficiently as goals would be achieved at lower social costs. Such an approach avoids an open war and occupation of the target countries in favor of policing and intelligence work. This especially requires international cooperation of intelligence services. Moreover, the local population and local institutions have to be strongly involved in international counterterrorism. This significantly reduces the feeling of alienation towards the invading counterterrorist forces.

The article was presented at the 2012 session of the European School on New Institutional Economics and the workshop "Approaches to Conflict Resolution" of the Public Choice Research Centre and Center of Conflict Resolution. In 2013, it was presented at the workshop "Wege aus der Gewalt" of the Institut für Friedensforschung und Sicherheitspolitik, Hamburg. Furthermore, the project was accepted in 2012 for the European Public Choice Society Meeting as well as the conference of the Italian Society of Law and Economics. The paper has been submitted for publication and is currently under revision.

"International Land Acquisitions and Hal Varian's Concept of Fairness" is joint work with Luis Thomás Montilla Fernández.

Numerous investors from the developed world started investing heavily into arable land in least developed countries after the 2007-2008 world food crisis. These investments bear huge potential to improve the circumstances for the poor local people in the host countries and increase world food security through more efficient food production. Our article scrutinizes whether large scale land acquisitions in least developed countries in Sub-Saharan Africa deemed to be fair from the perspective of Hal Varian's (1974) concept of fairness. Distributive fairness according to Varian requires pareto efficient and envyfree outcomes.

The acquisitions are a de facto land-reform in the host countries, transferring the right of disposal over land from local people and local smallholders to foreign investors. Our partial analysis focuses only on two parties, namely the investors and the local smallholders as the poorest affected party. Investigating how promised efficiency gains are distributed between these parties, we find that the investments are in the majority of cases not fair according to Varian. Either because they result in a pareto inferior outcome for the smallholders. Or because only the investors benefit from efficiency gains out of LASLA. In such an inequitable outcome the smallholders envy the investors.

Despite the huge potential for the significantly wealthier investors to improve the situation for the local smallholders in least developed countries, "land grabbing" does not unfold this potential in practice. Even though both home and host countries commit

to international human rights agreements, the financial incentives both for investors and for agents representing local people are too strong to respect the interests of the local smallholders. International legal sanctions capable of enforcing their interests and rights are impossible not only because the investments are protected by bilateral investment treaties. Moreover, local institutions are weak and the host governments are sovereign entities. One hope for improvement for the local people lies in strengthening their bargaining position.

A similar version of this paper has been published as "John Rawls's Theory of Justice and Large-Scale Land Acquisitions: A Law and Economics Analysis of Institutional Background Justice in Sub-Saharan Africa" in the *Journal of Agricultural and Environmental Ethics*, 26(6):1223-1240, 2013. The project was presented in 2012 at the International Workshop on Large-Scale Land Acquisitions by the German Institute of Global and Area Studies and at the IAMO Forum 2012: "Land Use in Transition" by the Leibniz Institute of Agricultural Development in Central and Eastern Europe.

Finally, "Behind the Scenes – What Determines Elections of Non-Permanent Members into the United Nations Security Council?" is joint work with Jan Schmitz. The article's goal is to better understand the functioning of one of the most powerful international organ: The United Nations Security Council (UNSC). The international community, in the form of the United Nations General Assembly (UNGA) regularly elects non-permanent members into the UNSC. This membership is highly desired and the competition between candidates toughens continuously.

Although the United Nations (UN) consist of heterogeneous members representing different cultural backgrounds, repeated interaction in the consistent forum of the United Nations General Assembly (UNGA) binds actors to adhere to a certain code of conduct. Although rules are coded in the Charter of the United Nations (1945), the assembly follows its own informal criteria. The official recommendations for electing a candidate focus on states' engagement for the goals of the United Nations, i.e. "maintenance of international peace and security and to the other purposes of the Organization, and also to equitable geographical distribution" (United Nations 1945: art. 23). However, giving their votes to certain candidates, UNGA members can reward state behavior. This raises the question of which behavior is rewarded?

In an insightful case analysis, Malone (2000) illustrates how countries compete for non-permanent seats. To improve the understanding of this in-transparent process, we decided for an empirical approach, collecting data on which candidates win an election and what behavior these states showed to the community during the years before the

election.

We find no evidence that the criteria coded in the UN Charter are particularly respected throughout the election. Our main finding is that weak ties through diplomatic delegates and memberships in international organizations have a small but significant positive effect on the chance to win a seat. Two approaches are possible to evaluate this result. On the one hand, embeddedness is a financial and organizational effort. Thus, signaling self-integration in – and obedience to – an international code of conduct that emerges democratically is a commitment to the community. On the other hand, however, embeddedness implies networking and obeying the rules that were set – potentially by the permanent members not even exposed to elections.

In 2011, the paper has been presented at the conference of the European Trade and Study Group and the annual conference of the European Association of Law and Economics. In 2012, we presented at the annual conference on the Political Economy of International Organizations. The paper was under revision at the Journal of Conflict Resolution, it has been offered resubmission after adjustments.

Chapter 1

Power Over Content – The Real Rationale Behind The War On International Music File Sharing[§]

Abstract

Since the early 2000s those few major corporations which have been structurally dominating the music market for decades lament continuously decreasing profits. Blaming these losses on new technology, the majors declared war on file sharing. This descriptive analysis shows that war cannot be won technically. Rather, it triggers perverse effects like bad press, more popularity for file sharing, it educates file sharers to better hide their activity and improve means of file sharing. However, innovative models of music distribution could provide a higher usability and make file sharing obsolete. Thus, why do the majors not innovate and why do they fight the war after all? This heuristic law and economics inquiry of the economic incentives and the political economy in the music industry argues that the war on file sharing is not about music itself. The real goal behind the war is to maintain the marketing control over the worldwide music market. While this secures the power of the major corporations, it negatively affects overall welfare.

Keywords File Sharing, Music Market, Technological Change, Innovation, Copyright

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1.1 Introduction

For decades, few major corporations have structurally been dominating the profitable and prestigious music market. The major labels and their sublabels concerted with trade organizations, collecting societies, performance rights organizations, etc. (hereinafter majors). Introducing the compact disc (CD) in 1983, the music industry decided to digitize its product. The digital data stored on the small optical disc provides a clear and distinct sound. With the diffusion of personal computers and the Internet, however, it was only a question of time before the digital content was compressible and could easily be shared over the Internet. Music is particularly adapted to online consumption and sharing. Consumers are predominantly young (RIAA 2009) and open to new technology (Bahanovich and Collopy 2013). The file size of a digitized song or an album is sufficiently small to be transferred online. At first, the majors did not respond to the new demand for digitized music for example by providing their digitized music in online music stores. In the spring of online music stores, only independent labels offered their content over the Internet with pricing on a per-song and/or subscription basis.¹ As a consequence file sharing technology became widespread in the late 1990s and digitized music went underground. The majors started to offer digitized music in the early 2000s almost a decade later: MusicNet was founded in late 2001 with support of Warner, Bertelsmann, and EMI (Electric and Musical Industries); its rival Pressplay was founded in late 2002, backed by Universal, Sony, and EMI. Users criticized the immature implementation and costs per song that exceeded those of CDs (TechHive 2002). PC World, an influential global computer magazine awarded both services with the ninth position of the 25 worst tech products of all time (PCWorld 2006). Both services have been resold and parented by RealNetworks, itself the parent of Rhapsody which has been restructured as an independent company in 2010 and again parents the now legal form of Napster. However, only from 2003 on, Apple's iTunes Music Store was celebrated as a breakthrough success in selling digitized music also for the majors (PCWorld 2006) and abandoned digital

¹An early example of a legal online music store is the Internet Underground Music Archive (IUMA), which was founded in 1993 in Santa Cruz, California (see the CNN report "IUMA on CNN (3/9/1994)" on http://youtube.com/watch?v=GT5LIEUJefM). In 1998 another service focusing on independent labels, eMusic, was founded and bought IUMA in the same year. The majors did not contract with eMusic before 2009, see Los Angeles Times 2009. Ritmoteca with a focus on Latin music was founded in 1998 and reportedly the first service to contract with any of the majors in 2000, i.e. with Sony Music Entertainment and Bertelsmann Music Group (see Billboard 2000). However, the company could not continue to raise money during the dotcom crisis and subsequently disappeared from the market in 2005. Rhapsody, an online music store subscription service, provides another interesting example of a still active company. Founded in 2001, Rhapsody started out contracting with 37 independent labels was able to license major content during 2002 (EContent 2002).

rights management on most of its songs in early 2009 (Ars Technica 2009). However, the file sharing infrastructure of Napster had exposed music enthusiasts to the possibility to communicate with each other. This changed the way information about music was exchanged and how consumers could discover new music, consequently raising the expectations towards new infrastructure of music distribution. Technical implementation of such infrastructure was feasible as Napster has shown in the late 1990s, but especially this second step was completely ignored by the majors as decentral information about music threatened their market power.

Since the early 2000s, the majors lament continuously decreasing profits. The trade organization Recording Industry Association of America (RIAA) represents the US recording industry distributors. For the US, the world's biggest music market, the RIAA (2009) diagnoses that the industry's "Total U.S. Dollar Value" was practically cut in half from \$14.6bn in 1999 to \$8.5bn in 2008.² Only recently, profits picked up again (The NPD Group 2012). Although the causality remains controversial, the majors reason that music fans substitute the legal product with illegal copies. Hence, they declared war on file sharing (Lemley and Reese 2004, Lessig 2005, 2008, Depoorter et al. 2011).

However, this heuristic inquiry demonstrates how innovative models of music distribution can provide higher usability to the consumer than any existing file sharing community. Moreover, throughout many surveys file sharers in general not only show a higher willingness to pay (WTP) for music content (see 1.4.1), they already accept monetary and immaterial costs linked to file sharing. In this light new models promise to be profitable once they successfully address the WTP and demand for digitized music. Furthermore, a descriptive analysis shows that the war cannot be won technically. Rather, it triggers perverse effects in the form of bad press, more popularity for file sharing, and such that file sharers learn to better hide their activity and improve means of file sharing. Furthermore, technology businesses step in, profitably providing infrastructure which can also be used for illegal file sharing, and serving music enthusiasts with their desired product. In their war on file sharing, lobbyists advocate strict monitoring of online traffic which threatens the integrity of the Internet as such. Given that file sharing will probably exist forever, that the war cannot be won but rather fires back, and that file sharers are willing to pay for content begs a twofold question: why do the majors not innovate and why do they fight the war after all?

Some even argue that "new technologies may offer golden opportunity for new publishers and artists to enter music pay markets" (Andersen and Frenz 2010: 755). Even

²Note that the numbers do not represent sales directly but are "based on manufacturers' shipments at suggested list prices" (RIAA 2009). Depending on buyers' stock, sales could be both higher or lower.

so, this heuristic analysis of the economic incentives and the political economy in the music market exposes that this golden opportunity does not hold for the majors. In line with the critiques of Lessig (2005, 1999, 2001, 2008) and Anderson (2006), this article argues that the war is not targeting file sharing itself and it is not about protecting music. Instead, it aims to divert public attention from the creative innovative potential to the potential destructive effects of technological change. File sharing and the new models have one thing in common. They undermine the power of the majors in the music market, more precisely their marketing power. The real goal of the war is to keep the customer away from a democratic market in which music consumption is no longer homogenized by the marketing of a powerful industry but discovered and enjoyed based on objective and democratic user recommendations. During the technological change of the last 15 years, the majors lost their gatekeeping control over music production and distribution. Losing the power over marketing will finally deprive these majors of their power over content.

Nonetheless, the music market as such could greatly benefit from innovative business models. Breaking up the oligopoly of the majors lowers the barriers to entry for new artists. A more healthy competition will not only increase welfare through lower consumer prices. It will moreover result in a more diverse music market, in which technology can better match of niche music and demand. Without a doubt, any upheaval in a market structure risks to be detrimental to those benefiting from the current structure. That said, many well-established artists now benefiting from royalty payments might be worse off once new models of music consumption and discovery are in place.

The remainder of this inquiry is structured as follows. First, a brief descriptive analysis of the music market demonstrates the concentration homogenizing the market and how this structure is challenged by technological change (section 1.2). Section 1.3 introduces the phenomenon of file sharing. Section 1.4 shows that although file sharing can have higher user attractiveness than legal alternatives at this moment, the potential for legal alternatives exceeds the possibilities of file sharing by far. It just has to be unlocked. Section 1.5 describes the war on file sharing and why it has failed. The real intentions behind the war, to preserve a gatekeeping power over the music market, are presented in section 1.6. Section 1.7 discusses implications for international law before the last section concludes.

1.2 A Brief Look at the Music Market

1.2.1 Domination of the Majors

To begin with, a definition of "the music industry" is always fuzzy. Indeed, the music industry with its countless labels, musicians, and agents is an "incredibly broad church" (see Feargal Sharkey in Page and Carey 2009: 7). However, the underlying structures of music production and distribution lead to a remarkable concentration of power in the hands of few major labels (Bishop 2005). From six major labels in the 1980, only half of them are left: Sony Music Entertainment (SME), Universal Music Group (UMG), and Warner Music Group (WMG). Table 1.1 shows how the three divide the major market share in the US market ranging between 83-90% in 2011 and 2012 (note that Electric and Musical Industries Ltd., EMI, was acquired by UMG in 2012).³ The US music market is the world's greatest music market but the level of concentration is similar also in other markets (Hutchison et al. 2009).⁴

Although the labels compete with each other, they share common interests and are internationally organized under the business representative International Federation of the Phonographic Industry (IFPI, the organization has national branches). Trade organizations like the United States' Recording Industry Association of America (RIAA), the British Phonographic Industry (BPI), the French syndicat national de l'édition phonographique (SNEP), the German Bundesverband Musikindustrie (BVMI) represent their interests nationally and cooperate with collecting societies like the German Gesellschaft für musikalische Aufführungs- und mechanische Vervielfältigungsrechte (GEMA). Given their interplay on the national and international level and their dominance over the world music market, this article refers to them as "majors." The terms "record industry" or "music industry" are not used since only these majors dominate the music marked, often directly against the interest of other members of the industry, especially smaller artists and music labels (Bishop 2005).

 $^{^{3}}$ Note that the numbers reflect "the market share for the entire entity including sub-distributed companies for the 52-week year; UMG completed the acquisition of EMI distribution at the beginning of Q4 2012. Market share reporting included the following adjustments: all of the labels formerly associated with EMI were moved to UMGD [Universal Music Group Distribution]. EMI was credited for all sales through week-ending 9/30/2012. All market share was attributed to UMGD thereafter" (Nielsen Company & Billboard 2013).

Note also that data on market shares may vary depending on the respective survey. The *Music* & *Copyright's annual survey of the recorded-music and music-publishing industries* (Music & Copyright's Blog 2012), published by Informa Telecoms & Media (http://www.informatandm.com) presents slightly different numbers for 2011. In 2011, the US market share of the then four major labels EMI (9.9%), SME (21.9%), UMG (27.9%), and WMG (15.1%) added up to almost 75%.

⁴See for China and South East Asia also The Register (2007).

Year	2012	2011	2012	2011	2012	2011
	Total Albums		Current Total Albums		Catalog Total Albums	
UMG	32.41	29.85	33.87	31.85	30.88	27.43
SME	30.25	29.29	30.65	29.56	29.82	28.97
WMG	19.15	19.13	17.30	17.39	21.07	21.18
EMI	6.78	9.62	6.82	9.07	6.75	10.34
OTHERS	11.42	12.11	11.36	12.14	11.48	12.07
	Physical Albums		Digital Albums		Digital Tracks	
UMG	33.53	30.53	30.52	28.35	33.76	32.97
SME	32.17	31.08	27.03	25.36	26.43	26.21
WMG	18.59	18.78	20.08	19.91	18.28	17.74
EMI	6.52	9.44	7.22	10.00	5.90	8.26
OTHERS	9.19	10.17	15.14	16.37	15.63	14.83

Power Over Content – The Real Rationale Behind The War On International Music File Sharing

Table 1.1: 2012 Year-to-Date US Record Company Market Share (Nielsen Company & Billboard 2013)

What caused this concentration? One would assume that the concentration has structural roots in the cost structure of music production, distribution, and marketing. However, the music industry as such is not a natural monopoly or an efficient oligopoly according to Baumol (1982), characterized by economies of scale or high fixed cost recommending to consolidate activities. Rather, the main reason for the concentration lies in a period of intensive horizontal and vertical integration with the aim to monopolize and control the market (Peterson and Berger 1975, Alexander 1994, Bishop 2005, Tschmuck 2012). Tschmuck (2012: chapter 9) thoroughly describes this process that even alarmed antitrust regulation in Europe and the US.⁵ The majors of the mid 1960s started to merge with and acquire labels of the same or smaller size which is referred to as horizontal integration (Alexander 1994). Vertical integration is the acquisition of firms in other levels of the music economy. Peterson and Berger (1975) highlight three key factors. First, the artistic factor in the form of song writing, publishing and performing talent. However, competitors can always substitute this factor so that absolute control of this sector was impossible. Consequently, the majors sought control over two other central areas downstream in the production process namely over the media of *merchandising*

 $^{^{5}}$ With regard to the planned merger of Warner Music Group with EMI, Tschmuck (2012: 177f) remarks that "The merger of these two music giants failed, however, due to the objections of the European antitrust commission, which judged this merger to constitute an illegal concentration of market forces, including those of the music market. The U.S. antitrust commission (FCC) agreed, resulting in the termination of the fusion between WMG and EMI."

music – which in the early days were Broadway productions, live network radio variety programs, and recorded music programs – and the channels for *distributing* records in the form of wholesale dealerships, warehouses and record jobbers (i.e. rackjobbers commissioned to place records in designated points of sale). In combination, these factors secured significant control over the market in comparison to independent labels:

"While they did not own many retail record outlets, they could discourage individual retailers from handling the records of independent companies by threatening to delay shipments of their own most fastmoving records" (Peterson and Berger 1975: 162).

Fundamentally, this structural dependence on mainstream content still secures significant influence for the majors until today.

The resulting increase in scale and especially capital endowment of the majors also paid off in other dimensions. Music is an experience good (Nelson 1970). Foreseeing the success of investments into experience goods is difficult, especially with regards to new projects. This makes the music industry a risky business with a high failure rate (Landes and Posner 2003). Approximately every 20th project succeeds in that it is profitable, still requiring sophisticated, capital-intensive marketing (van Eijk et al. 2010). The majors consequently specialized in producing "hit" songs and albums of which few were profitable enough to subsidize a range of other projects. Although fix costs of production are not high as such, music production requires initial advance payments. Smaller independent labels with less money at hand simply could not afford to take such risks especially leveraging their product with extensive marketing campaigns.

One might expect that the discovery and selection process of artists and repertoire (A&R) is also too costly for small labels at least in the form of time intensive research. However, it has always been just the independent companies providing the market with fresh and innovative music (Alexander 1994, Tschmuck 2012). Tschmuck (2012) elaborates that the majors were even able to exploit the independent labels' innovativeness as the they were tied to the majors through exclusive distribution contracts.

As a result of their monopolization efforts, the majors have been enjoying a profitable gatekeeper-position (Wu 2003). On the one hand, they are an oligopsony towards artists "buying" their music to distribute it on a world market. On the other hand, they are an oligopoly towards consumers in that they promote and distribute artists to retailers (Helberger et al. 2012). The central marketing channel has always been broadcast radio and music television. The goal is to boost retail sales through radio exposure, herewith creating chart hits that feed back on the awareness about the musician. This

exposure is still highly desired by musicians (see, e.g., The Guardian 2011b). To this day, smaller labels contract with majors when they want to exploit conventional retail channels. Referring to the particular double character as gatekeepers of major labels buying and selling music, Bishop (2005) speaks of an "oligonomy."

Moreover, by exercising their control over distribution channels, the majors were able to affect music availability, popularity, and ultimately music *taste*. Their strong position was always controversial. As Jeff Price, former CEO of the online music distribution service TuneCore, expounds:

"The old media outlets for music discovery and exposure were the tightly controlled and gated arenas of commercial radio, MTV and print magazines, all of which could only be reached by a record label. [...] Labels were well aware of the position they held and took full advantage of it. They exploited the hell out of artists by requiring them to give up their copyrights, control and over 85% of the revenue from the sale of the pre-recorded music in order for the artist to gain access to distribution, marketing, and recording funds. In addition, labels removed transparency in royalty accounting and did their best to create laws that singularly benefitted them" (Price 2012).

Copyright played an important role to make the music business profitable and to secure the gatekeeping position (Kraakman 1986, Wu 2003, Bambauer 2008). Usually, artists sell the copyrights to their future music to a label in exchange for advance money. Because of the importance of copyright duration, the industry continuously lobbied for its extension (Oberholzer-Gee and Strumpf 2010, Lessig 2005: 133-135), to now 70 years after the death of the composer who died last (Bell 2001). Royalties allow labels to accumulate rents for projects finished in the past. With these capital resources they can recruit (artists and repertoire) and finance new artists.

The highly unequal distribution over content reaching an audience emphasizes the marketing power of the majors. Referring to 2007 Nielsen Sound Scan data, Paul Lamere⁶ concludes that even though more than 4 million tracks were sold, "only 1% of those tracks accounted for 80% of sales. What's worse, a whopping 13% of all sales are from American Idol or Disney Artists. Clearly we are still focusing on the hits" (Lamere 2009). A close look at the most recent data from Nielsen Company & Billboard (2013) shows that this has not changed. Top hits are practically always major label productions and dominate

⁶ Paul Lamere is an expert on music recommendation systems (Lamere 2012, Celma and Lamere 2011) and the director of Developer Platform for The Echo Nest, a music intelligence company that provides services to music companies such as EMI, eMusic, MTV, Rdio, or Spotify (http://the.echonest.com/). Furthermore he serves on a number of program committees including the International Society for Music Information Retrieval (http://www.ismir.net/).

all segments. Approximately 75,000 new albums are released yearly in the US (the trend is falling see for the years 2010 and 2011 Nielsen Company & Billboard 2012). The number of all available songs is hard to guess but leading online retailer or streaming services now hold up to 30m songs.⁷ The top ten albums and track equivalent albums have a 5.3% share on total album sales and even the top ten digital songs amount to 3.5% on total digital song sales.⁸ This concentration holds in the same way for more modern streaming services: 95% of the content makes up for 20% of listens on Spotify and only 10% on We7 (Masnick 2009g). An unequal distribution of few products accounting for the majority of sales is often observed on markets. This is conventionally known as the famous 80-20 rule dating back to Vilfredo Pareto in the early twentieth century (another connotation is power law or Zipf-Mandelbrot law).⁹

To sum up, the majors' gatekeeper position secured their dominance in the music market via their control over distribution and marketing. However, this dominance can hardly be legitimized as the efficient way of music production, distribution, and marketing by structural reasons. Rather, the majors monopolized the market over time through horizontal and vertical integration. Moreover, given that music is a homogeneous commodity, the concentration under one corporation is unlikely to fulfill the requirements of a diversified demand which quickly changes in taste. As the next section will show, technological change fundamentally challenges this structure.

1.2.2 How Technological Change Affects the Music Market: The Long Tail Against the Hit-Driven Mindset

Technological innovation fundamentally changes the music market environment (Ku 2002, Anderson 2006, Weeds 2012, Eger and Scheufen 2012, Price 2012, BBC 2013a). First, lower production cost allow musicians to record, edit, and produce decent or even high quality music in their home studio at only a fraction of the former cost.¹⁰

Second, distribution cost fall significantly once music is marketed via the Internet. This includes the needlessness to press a large number of discs which might have to be manually processed, checked, packed, labeled, stocked, and delivered to retailers, requiring sophisticated logistics. Moreover, this requires the pre-financing of the above

⁷See below at footnotes 15 through 17 and Microsoft (2012).

 $^{^8}$ See tables 1.2 and 1.3 in the appendix. An average album has approximately 12 songs. Thus, 10 albums hold about 120 songs which is .0004% of the 30m songs that Xbox Music offers.

⁹See Pareto (1896, 1897) and Mandelbrot (1982) and with regard to music Manaris et al. (2003) Such a distribution comes with a fat or long tail which will be discussed below.

 $^{^{10}\,\}mathrm{Tschmuck}$ (2012: 195) speaks of a few thousand dollars instead of the former hundred thousands of dollars.

which is risky because successful selling is usually not guaranteed (except the contracting power enables the producer to implement guarantees for a minimum number of sales). Digitized music, on the other hand, can be replicated from just one original. Thus, digital music distribution replaces the former structure merely with a server infrastructure and front ends to purchase or stream music. The customer can directly buy from the artist if she decides to host selling infrastructure on her own server or website. Costs for distribution might occur only when music is sold. This significantly reduces the financial risk especially for smaller labels who now no longer have to press a huge number of disks. Of course, this is to the severe disadvantage to the conventional middlemen in music distribution ranging from distributors to record stores who become redundant for digitized music.

Third, direct marketing is now possible through social media or selling through own websites or professional online music stores, allow more players to market music as a product.

All this results in more music available on the market. Following the logic of supply and demand, the price of single music units like songs or albums should fall. Given the abundance of music, consumers might also lower their willingness to pay (WTP) at least for individual consumption of songs. Coming generational change will probably further decrease this WTP once a culture of quasi-free, e.g. ad-sponsored, music is fully established (see on this NPR Music 2012b).

In light of various online streaming services, of which Google's YouTube might be the most famous, this situation has already become reality. In December 2001, Rhapsody was the first service offering a complete, organized library for streaming and download. At this moment, a variety of streaming companies fight for market domination in cut-throat competition (Price 2012), including Aupeo!, Bandcamp, Deezer, Google Play Music, Grooveshark, Last.fm, MOG, Pandora, Napster, Rdio, Slacker Radio, Spotify, We7, or Xbox Music. Some restrict availability to access nationally, increasingly, offline- or mobile-use is offered as well. While the traditional royalties business model will continue to exist within the new streaming services, it will lose profitability as it continues to focus on the conventional sales model. Streaming services, the new models of music distribution, revolutionize the conventional understanding that music has to be owned in order to be enjoyed. New models rather rent temporary access to music:

"The innovative and revolutionary character of such business models is visible in accounts allowing for features for mobile devices and offline listening what leads to redundancy of the physical storage of digitized music files" (Thomes 2011: 3).

The competition between streaming services is so stiff as each service is forced to make its network of subscribers large enough for economies of scope. On the other side, the service has a better bargaining position towards the content providers the more people it can reach. Some voice concerns that the majors use their power to shape streaming services according to their interest (Masnick 2009f, 2011b,a). There is little doubt that innovative providers might become the new gatekeepers (The Wall Street Journal 2007). The power of the major labels has already started to erode (complex music 2012, Music & Copyright's Blog 2012).

In a new environment of more or less freely available music, WTP has to originate from something extra to the song. Sources of income include concerts, offering a special consumption experience, direct support through donations or merchandise, special editions of their sound carriers, revenue through sponsoring and advertising, or changing back to analog carriers like vinyl, which allow for a special haptic and listening experience and are harder to digitize (Helberger et al. 2012, WIRED 2009b). Mike Masnick (2010c), founder of the influential blog "techdirt", refers to this as "Reason to Buy" and provides nine insightful examples of a successful application for individual music acts.¹¹

Of course, not all artists can or want to connect with their fans like Masnick advances. Masnick's proposal is controversially discussed in the comments which range from full support to harsh criticism, e.g. in that artists have to "prostitute" themselves for a decent pay, unable to concentrate on their music production.

However, technological change has driven the music business into the dilemma of attention economics, where "a wealth of information creates a poverty of attention and a need to allocate that attention efficiently among the overabundance of information

¹¹As a second dimension, he emphasizes the necessity for artists to connect with their fans (Masnick 2010c). To briefly summarize Masnick's examples: (1) The famous rock band Nine Inch Nails shares its music for free online but applies price discrimination for physical carriers with extras: CD, Deluxe Edition Package, Ultra-Deluxe Limited Edition Package; the band connects with fans through a sophisticated website, encouraging fans to picture and video concerts and publish and discuss this content on the band website (see also Masnick 2009b). (2) Los Angeles based session drummer Josh Freese played on over 100 albums, e.g. with Nine Inch Nails, Guns 'N Roses, Sting, Devo, The Vandals, or the Offspring. For his first solo album, he decided for a slightly different price discrimination, ranging from private drum lessons to his Volvo station wagon. (3) Singer Jill Sobule was dropped by her labels, before she crowdfunded her album "Jill's Next Record." (4, 5) Country/rock/blues singer and guitarist Corey Smith and singer-songwriter Jonathon Coulton built a fan-base through free music while their revenue came through shows. (6) Swedish singer/songwriter Moto Boy added original wind-up music boxes to this business model. (7) Amanda Palmer (see also below) broke up with WMG subsidiary Roadrunner Records and now lives off merchandise and performances. (8) Boston based singer Matthew Ebel lives from his performances in Second Life (an online virtual world); 40% of his income come from subscriptions (to be sure, we cannot know how much this is in absolute terms). (9) San Francisco based electronic musician Moldover sold his album in a CD-case which is a working circuit board instrument. Obviously, labels do not benefit from and thus have no interest in any of these sources of revenue.

sources that might consume it" (Simon 1971: 40-41).¹² The greatest challenge in this in-transparent environment lies in raising awareness for a given product. This requires reliable signals for the consumer allowing to filter and discover new music.

The scholarly debate discusses two consequences of such a development. The theory of superstars holds that falling distribution and transaction costs will converge consumption towards few superstars (Rosen 1981). Allowing for consumption of the "best" – which could be defined as the most talented¹³ – artists regardless of time and place, new technology leads to a winner-take-all society (Frank and Cook 1995). The idea that social benefit results from the consumption of the same goods while niche products remain unattractive relies on distribution phenomena by William McPhee. Analyzing mass behavior, McPhee (1963) observes a self-reinforcing gravitation towards popular products, basically triggered through marginal, light consumers. Uninformed or potentially even relatively indifferent about what to consume, they join the mainstream (see also Elberse 2008). Consumers seeking reliable signals might thus rely entirely on the big player's conventional superstars.

However, especially with regards to music, the superstars theory is based on a distribution system characterized by physical limitations. Conventional brick-and-mortar stores had only a limited capacity to stock and display music to their customers. Wal-Mart, as one of the biggest US retailers, has a repertoire ranging between 10,000-50,000 songs. All other songs at a given point in time were hardly ever stocked, let alone sold in the physical mainstream market. Technological change has practically eliminated these physical constraints.

Hence, this article, follows the opposite *long tail* theory of Anderson (2006). The long tail refers to the convexity of the standard demand curve. Figure 1.1 ranks all music titles by their sales volume on the horizontal axis, sales are depicted on the vertical axis. Only a small percentage of products (hits) accounts for the majority of sales.¹⁴ With respect to music the selection of the largest retailer in the market, composes the "head" of the distribution – i.e. the 10,000-50,000 songs of Wal-Mart. Everything else is the "long tail." While it is true that only a small percentage of all music dominates still today's mass market, Anderson suggests that this superstar perception is outdated. Is is based on hits, not on sales and was imposed on the music market because of the

¹²Probably first mentioned by Simon (1971), the concept has gained popularity, see Franck (1999), Goldhaber (1997), Klamer and van Dalen (2002), Lanham (2006), Levy (1988); and also Kahneman (1973), Huberman and Wu (2008), Masnick (2009g).

¹³Although such a definition might be disputed, concepts as "talent" are the usual explanation to legitimize a superstar distribution on a market (see, e.g., the line of argument in Elberse 2008).

 $^{^{14}}$ This is conventionally known as the famous 80-20 rule, dating back to Vilfredo Pareto in the early twentieth century.

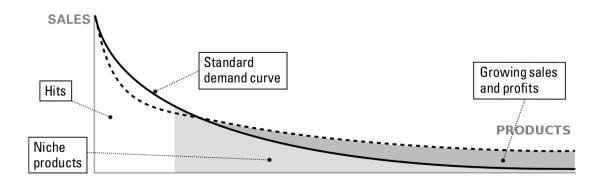


Figure 1.1: Graphical Representation of Anderson's Theory: "Online Channels Will Fatten the Long Tail" (from Elberse 2008: 4)

structural, physical limitations of production and distribution (see also Ku 2002). New search and filtering tools permit to match the supply of heterogeneous niche-products and demand. At the same time online retailers, mail-order houses, or streaming services can stock a greater product catalog than the conventional store (Brynjolfsson et al. 2003, 2006, 2010, Anderson 2006). Apple's online music retailer iTunes offers over 26m songs,¹⁵ the streaming service Deezer offers 25m songs,¹⁶ followed by Spotify with 20m (WIRED 2012d). The currently biggest hybrid digital music service, Microsoft's Xbox Music, offers 30m songs (Microsoft 2012).¹⁷ The dashed line in figure 1.1 depicts how according to Anderson the slope of the standard distribution will change such that more music is listened to, but the most consumed music will loose listeners.

To support his argument, Anderson refers to data of the former "digital jukebox" Ecast. Albeit not in big numbers, 98% of their catalog was sold – even after significantly extending it far beyond most record store inventory. The problem is the hit-driven mindset in which the whole entertainment industry is caught:

"If it is not a hit, it is a miss. It has failed that economic test and therefore, never should have been made. With this hit-driven mindset, history is written by the blockbusters, and the best test of quality is box-office gross. And this doesn't just apply to Hollywood. It's how we assign space on store shelves, fill time slots on television, and build radio playlists. It's all about allocating scarce resources to the most "deserving," which is to say, the most popular"

¹⁵Note that this number "refers to the total number worldwide. Not all content is available in all countries," see http://www.apple.com/itunes/what-is/, May 27, 2013.

¹⁶See http://www.deezer.com/en/features/music.html, May 30, 2013.

¹⁷Note that "some Xbox Music content may not be available via Xbox Music Pass, and may vary over time and by region," see http://www.xbox.com/en-US/music?xr=shellnav, May 27, 2013.

(Anderson 2006: 40).

While some have challenged Anderson's approach,¹⁸ it is hardly surprising that his hypothesis does not show yet. The majors still dominate the music world and both supply and demand are still caught in a hit-driven mindset.¹⁹ It should not be forgotten that in a world of home music consumption the current appearance of superstars is a rather recent.²⁰ One could argue that the boom of the music industry in the 1990s (Handke 2010b) was only possible because of a combination of available home stereo equipment and the possibility to ban music on a physical carrier for individual consumption (Lessig 2005). For a very long time the majority of people consumed music decentrally and locally. While the majors benefited from the innovation of the physical carriers, they might lose out during the current one.

Music is a highly emotional, personal, but at the same time cultural context-based product. For example, music plays an essential role for many social subcultures together with fashion (Hebdige 1981, Thornton 1995). It shall not be disputed that music consumption is always embedded in a cultural context and collective consumption bears an inherent quality. Even so, collective consumption does not necessarily have to take place in a mass event. Groups of medium or small size can consume niche music collectively as well. The key lies in intuitive systems that permit to discover attractive music in the niches of the long tail. Novel models of music distribution have to focus on three dimensions: instant access to an attractive music library, convenience in organizing, browsing, and finding desired music, but especially a sound recommendation system to discover new music.

¹⁸Anderson does not limit his theory to only music. Regarding video sales, Elberse and Gee (2007) criticize that Anderson does not back his hypothesis with sufficient data and find empirical evidence for both theories. Obviously, the tail is going to become ever longer with a music marked going global and including old, so far neglected music, not only of smaller independent labels but also non first-world markets. Consumers have a limited amount of time and as long as the archived music grows, they still can listen to only a selection of all available music. When the superstars theory holds that, say, only 10% of the music is listened to by 90% of the consumers, this translates into a distinct absolute number q. When the total of music increases, the absolute number q increases proportionally. As long as 90% of consumer still listen to only 10% of the music, Anderson is right in that the absolute amount of consumed music increased even though the distribution did not change. Aware of this Elberse (2008) still defends the superstars theory holding that the tail remains long, flat, and basically unattractive for the consumer. In his reply to Elberse, Anderson (2008) highlights his differing interpretation of head and tail in the data.

¹⁹This mindset reaches so far, that the majority of new artists seems to expect to become stars signed by major labels (see the survey summary by Digital Music News 2011). This is obviously an unrealistic overweighting of small probabilities (Kahneman and Tversky 1979).

²⁰ To be sure, the possibilities of music consumption affected the number of artists consumed widely. Centuries ago, music of famous composers like Bach, Mozart, Verdi, etc. was mainly interpreted in relatively scarcely available concert halls.

However, the majors did choose not to invest into new distribution systems. Although streaming services have been emerging the contemporary commercial supply exploiting filters based on recommendations, especially user-recommendations, is still very underdeveloped (Lamere 2009). This is not for no reason. As this analysis will show, such new recommendation-based filters undermine the marketing power of the majors and fundamentally threaten their dominant position. But where do those consumers find their product who wish to escape mass marketing? With the possibility to share music files over the Internet, many of these consumers turned to file sharing.

1.3 The Phenomenon of File Sharing

1.3.1 Brief Historical Overview

Not only did technological change alter the market environment, it also increased demand for the new product of digitized music. Instead of answering to technological change by investing into innovative business models, the music industry chose to ignore it (see, e.g., the Helberger et al. 2012, Cammaerts and Meng 2011, Cardi 2007, The Economist 2009, Gruley et al. 2012).²¹ As a consequence, demand for digitized music went underground, where tech-savvy customers created their own environment for their new consumption patterns. Although the exchange of files was technically possible already in the 1970s (Crosby 1995), file sharing became widespread in the late 1990s. A very brief overview might summarize the history of file sharing as follows (see also Oberholzer-Gee and Strumpf 2010: 32):

- 1988 **FTP**: the file transfer protocol allows to exchange files between computers via Internet.
- 1991 **MP3**: the MPEG-1 or MPEG-2 Audio Layer III²² allows for compression of music; music files can be exchanged even though bandwidth is still low in comparison to

²¹Note also the eye-opening statement of Karlheinz Brandenburg, who with others developed the MP3 format at the Fraunhofer Institut. When his colleagues, also working on music compression, approached the music industry in Autumn 1994, all he earned was – in his words – "polite disinterest." See his talk "Innovation in Zeiten der Unsicherheit" at the "Zukunftskongress 2020" of the 2b Ahead ThinkTanks in 2011 on https://www.youtube.com/watch?v=M8pJ0eDt0r8, April 24, 2013 (after 2:20 minutes). Cardi (2007) suggests that the delayed reaction might be a result of the fractured administration of music copyrights.

²²MPEG stands for the Moving Picture Experts Group (even though its formally known as formally known as ISO/IEC JTC1/SC29/ WG11), which was formed to set standards for audio and video compression and transmission (website: http://mpeg.chiariglione.org/). For a brief summary of encoding as well as a comparison of MP3 with the more advanced MPEG-2 Advanced Audio Coding (AAC) see Brandenburg (1999) and also stereophile (2008).

today's standards in the developed world.

- 1998 **MPMan**: the first mp3-player enters the mass market in Asia, fabricated by South Korean company SaeHan Information Systems and with a capacity of 32 or 64 MB.
- 1999 Napster is the first peer-to-peer file sharing software and community.

Napster removed the server-client separation on a big scale in that clients served other clients as well. It also introduced a search function which is a key feature for functioning file sharing as it allows peers to easily find particular music and not only to browse available content. Moreover, Napster included a chat function allowing peers to communicate via text in real time (Green 2002). This is important for peers to discover new content and to build ties with other users, ultimately strengthening the community. After the birth (and death) of Napster, different means of file sharing were invented and spread throughout the Internet. Although legal file sharing does of course exist, in the context of this analysis file sharing refers to private individuals who share copyrighted digital music files without permission and remarkably also without knowing each other. In more concrete terms, single users inject content into the network so that other users can access it. They do so either by serving themselves as servers to other peers through the Bit-Torrent protocol (peer-to-peer, P2P) or by uploading to a server (cyberlockers) (Biddle et al. 2002). These two ways of file sharing seem to be the most popular at this point, while P2P still dominates (Palo Alto Networks 2013). This connection of music enthusiasts sharing the same music taste was revolutionary. As a typical result of networked knowledge emerging with the Internet, consumers no longer had to rely on central information, it in the form of advertising, radio shows, magazines, or the recommendation of the clerk in the record store. Users could now make recommendations directly to other users.

The BitTorrent Protocol (P2P) permits resource efficient, decentralized distribution of digitized content even in networks with lower bandwidth. It is especially helpful to distribute large files and this perfect for free, open-source software or media. However, also illegal content is shared through P2P. Even though BitTorrent traffic does not necessarily require a central instance, it is usually administered through a tracker. A BitTorrent tracker is a server that assists in the communication between users (peers) using the BitTorrent protocol. Conventionally, the term tracker also refers to the website that lists and provides access to all available files. When torrents are posted on a website, this often includes valuable information such as descriptions or pictures, comments, and ratings. Colloquial language is a bit confusing here. The small torrent-file merely enables a peer to connect via the BitTorrent protocol to other the peers who simultaneously up-

or download the destination file from their computers. This destination file itself is also referred to as torrent. All peers connected in one torrent are called a swarm (on torrents, see Wu 2003, Carrier 2010). Such trackers can be public or private.

Every Internet user can access a public tracker but so can the majors to monitor copyright infringement. A private tracker is basically an invitation-only file sharing club, where only members have access to shared files. Since these torrents are not public, they are harder to monitor. Both examples will be discussed below. Since content is not stored on central servers for a P2P community,²³ continuous upload through the community is required to keep content available and the community alive.

Inasmuch as online behavior is (still) a private matter and thus not fully monitored, P2P still seems to be the dominant way of worldwide file sharing (see, e.g., Bahanovich and Collopy 2013). However, the share of cyberlockers increases (Mahanti 2011, Marx 2013).

Cyberlockers rent remote server space, so called cloud computing. While cloud computing is extremely popular and useful for businesses and private individuals, it reaches legal limits when customers upload copyrighted content for *other* users to download. Links to files stored on cyberlockers are usually posted on theme blogs and can be filtered through search engines like Google (see also Rodrigues and Druschel 2010, Mahanti 2011, Wood 2012, Marx 2013).

Note that peers only create and share identical copies. In this sense no peer "steals", file sharing is not theft but copyright infringement (Green 2012). File sharing does not know national borders as peers are connected world wide. Prosecution, however, is still limited to national legal space. File sharers do in general not follow commercial interests. However, businesses cash in on file sharing through, e.g., hosting ads on (tracker-)websites²⁴ or selling access to their server space.²⁵

1.3.2 Is File Sharing Detrimental to Music?

While the industry causally links its past losses to file sharing as a substitution for legal offers, this causality is controversial in the scholarly debate. A variety of articles addresses the issue whether file sharing affects media sales, i.e. mainly film and music, or not. Oberholzer-Gee and Strumpf (2010) emphasize that theoretical results of file sharing on sales are inconclusive (for a survey see Peitz and Waelbroeck 2006a). Thus, the question

 $^{^{23}\,\}mathrm{Only}$ the BitTorrent tracker is physically stored somewhere and can be shut down.

 $^{^{24}}$ Here, a notorious example is The Pirate Bay, see Ars Technica (2008b) and the further discussion below.

 $^{^{25}\}mathrm{See}$ below section 1.5.1 footnote 59.

should be addressed empirically. The majority of articles finds file sharing to have a negative effect on sales with an average displacement effect of 20%. Still, conclusions are "decidedly mixed" in some 16 of the major publications until 2008 (Oberholzer-Gee and Strumpf 2010). The two different camps find different effects and criticize each other's data.²⁶

Tschmuck (2012) brings forward another notable argument for the decline in music sales. Record sales were traditionally based on albums. The digitization of music disrupts music distribution in the sense that the selling of individual tracks is significantly simplified. This changes the album market into a singles market. Tschmuck (2012: 190) argues that albums allowed to achieve higher sales prices through bundling few sought after songs with other songs less in demand. In a digital environment, this is hardly any longer feasible. Except price discrimination such that prices per song drop once the whole album is bought, the customer can not be convinced to buy a whole album if she desires just few of it's songs. In this change, Tschmuck sees the true reason for the declining revenues regarding record sales in the music industry.

It is important, however, to highlight that even if the music sales revenues decline, this does not necessarily affect music as such, not to mention economic welfare. If consumers have a preference for music, they will spend their money on music. If the price for music distribution falls consumers will simply spend some of their money for other products. Thus, losses for the music industry are gains for other industries (Romer 2002, Page 2008). Significant increases in expenditures for personal computers, Internet and mobile telephony plans, smart end devices, media players (Leung 2012), satellite premium digital radio subscriptions, video consoles and games, but also concert tickets support this point (Bahanovich and Collopy 2009, 2013). Note, that the main target group for music are still younger customers who are also the most technically interested (Bahanovich and Collopy 2013). In this light, the RIAA – referring to the policy report of Siwek (2007) – either shows utter economic ignorance or rather intentionally aims to mislead the public calculating "the annual harm at \$12.5 billion dollars in losses to the U.S. economy as well as more than 70,000 lost jobs and \$2 billion in lost wages to American workers" (RIAA 2013).

For the short term, van Eijk et al. (2010) rather argue in favor of a positive welfare effect. Economic theory holds that in a competitive market the price should equal marginal cost of production. In a world of digitized music, the marginal cost of production for

²⁶ Those publications include Peitz and Waelbroeck (2004), Tanaka (2004), Zentner (2006), Oberholzer-Gee and Strumpf (2007), Liebowitz (2010), Rob and Waldfogel (2006), Gopal et al. (2006), Andersen and Frenz (2010), Liebowitz (2008), Leung (2012); see also Lenhart and Fox (2000), Andersen and Frenz (2007, 2008), Liebowitz (2010), Bahanovich and Collopy (2013).

another track, another extended play (EP), another album are zero. The opportunity to download music illegally effectively lowers the market-price for music. As a consequence, previous producer surplus shifts to consumers. But since consumption of digitized music is non-rival (the number of identical copies is unlimited) and since not every downloaded song would have been legally bought (rate of substitution), the new consumer surplus is higher than the loss of producer surplus (see also Romer 2002).

However, the problem lies before content is produced: economic theory also holds that only enforced property rights guarantee the profits necessary to provide sufficient incentives for innovation and content production (Romer 2002, Boldrin and Levine 2002). Note that even though the costs of music production fell considerably because of technological change, initial fixed costs remain high. If not necessarily in terms of money, at least in terms of opportunity costs of time. File sharing destroys profit opportunities at least in part. Thus, material incentives for music production become weaker. But how important is a musician's monetary motivation? Is it reasonable to assume that young musicians carefully weigh the costs and benefits of a career in the music business, carefully calculating opportunity costs? Even Liebowitz, an author very concerned about the destructive effects of file sharing on the industry, acknowledges that "some incentive to create still exists, in spite of the failure of copyright law to fully protect against copying" (Liebowitz and Watt 2006: 537). Oberholzer-Gee and Strumpf (2010) invoke that artists might be strongly intrinsically motivated so that monetary incentives are secondary. In a survey including over 5,000 musicians in the US, DiCola (2013) found that the average artist gains only about 10 per cent of her income with copyrighted material.²⁷ So it might well be that musicians are not fully incentivized by material benefits.

This turns the question as to whether file sharing is detrimental to music production into an empirical one. Did the musical output decrease or rise after file sharing became widespread? Looking at the number of albums released per year which doubled over the last ten years from 35,516 albums in 2000 to 79,695 in 2007, Oberholzer-Gee and Strumpf (2010) argue that the output rose. Although the increase is remarkable, album sales are not a perfectly reliable measure for musical output, nor do they indicate whether new artists are attracted. New albums can be reissues, compilations, best-of collections, or simply digital-only versions of already existing material. In order to improve the understanding for the effect of file sharing on music output, more thorough empirical analyses

²⁷Numbers vary through different genres. Composers depend a lot on their income from copyrighted material. For a comprehensive summary, see Masnick (2013b). Without a doubt, this percentage should be set higher for established artists. Although in conventional music contracts the labels hold the rights to copyrighted material and artists receive upfront payments, these payments will be higher as long as the profits from copyrighted material can be expected to be higher.

are necessary. For Germany, however, the worldwide fourth largest music market, Handke (2010a) finds, for the period in which file sharing became widespread, no decline for the supply of "new titles" (applying several measures to avoid double counting). It is conservative to assume that such a trend will show for other markets as well once data is more thoroughly studied.

Depending heavily on royalties, the majors ignore the potential overall advantageousness of file sharing in their argumentation. But new, unknown artists have different worries. In a royalty system, nobody might buy their music simply because nobody knows about it. In the past, the major hope for these artist consisted in contracting with a label powerful enough to advertise and expose their music through sophisticated marketing channels (Helberger et al. 2012, The Guardian 2011b). Yet, at the same time, these artists were fully dependent on the label, which illustrates the labels' gatekeeper position. Today's widespread availability of music – and this includes the availability through file sharing – introduces consumers to new music and allows to try out music before making the decision to purchase. This so called "sampling effect" (Shapiro and Varian 1998, Liebowitz 2006) creates new demand and income for artists. Consequentially, several influential characters in the music business promote file sharing, referring to the free availability of digitized music, as not only inevitable but profitable (Lemley 2011, Gopal et al. 2006, Peitz and Waelbroeck 2006b, Financial Times UK 2008, Masnick 2010c, 2013b, Palmer 2013). Very recently, the majors have been starting to view free content as a marketing tool themselves (Billboard 2013).

To sum up, the effect of file sharing on music output remains controversial. However, substituting legal with illegal content will continue as long as illegal supply remains superior to legal offers.

1.4 The Ultimate Superiority of Legal: Access and Discovery

1.4.1 File Sharing is not Free

This section demonstrates the attractiveness of file sharing but also why legal alternatives could at this moment be more attractive to the consumer if they exploited the full potential that new technology offers. First, it is important to acknowledge that file sharing is not free of costs in the way the majors present it. As a second step, one has to understand the present attractiveness of file sharing, before introducing the potential of legal models implementing music discovery based on user recommendations.

The costs of file sharing bias the whole picture. The popular argument "you can't

compete with free" is flawed because you can compete with free (Lemley 2011).²⁸ It is above all false since file sharers are willing to pay for their file sharing but also show a higher WTP for music content. For those who perfectly substitute legal purchases with illegal downloads, file sharing incurs especially search and information costs. It requires time and effort to become familiar with the necessary software and platforms. Moreover, illegally obtained content can be of poor quality, if not dangerous. Ranging from low bitrates, poor lossy compression, poorly or falsely tagged songs that disorganize the music library, to corrupt files or even computer viruses (Johnson et al. 2009). File sharers who also upload content have to inject new digitized music from legally obtained sources. This might incur digitizing ("ripping") music from physical carriers themselves. They have to describe it and make it available in such a way that other users can find it. All these costs occur before considering the illegality of file sharing. To reduce the risk of legal consequences, file sharers might take measures to disguise their activity, meaning that illegal activity cannot be linked to an individual. Two ways are possible. Either the activity cannot be monitored ("darknet") or the monitored activity cannot be attributed to the individual.

Several "darknet"-options are already available but offer little convenience and incur costs. Three examples are (1) friend to friend (F2F) file sharing with known and trusted peers. F2F works either offline in the physical world via data storage devices like flash drives or online in closed networks among unambiguously identified peers; (2) less intimate but also harder to access are private BitTorrent trackers; (3) the paid usenet, where neither the up- nor the down-loader can be identified since no data is stored about and no activity can be linked to users (see Johnson et al. 2009, van Eijk et al. 2010, Biddle et al. 2002, TorrentFreak 2012b).

Usenet is a paid service and offline F2F relatively inconvenient, as it makes no use of the Internet and requires physical displacement. But also activity in private trackers translate into real economic costs. Above all, it is hard to become a member (FileShareFreak 2009). Once membership is achieved, it requires to contribute a certain upload to the community, often calculated through an upload/download ratio. Members falling below a certain ratio can no longer download or even lose their membership. It is especially hard for new members to achieve a certain ratio. The efforts to acquire a desired ratio range from understanding the software, reserving disk space and Internet bandwidth to remaining online 24/7. Not to mention own contributions to the community be it in from of donations, new uploads, or administrator work (for a very good introduction see TorrentFreak 2008b, Torrent Invites 2008).

²⁸ An often mentioned example is bottled water, see also Masnick (2007, 2010a), TorrentFreak (2012a).

Another option lies in disguising one's identity. An Internet user is conventionally identified through an Internet Protocol (IP) address. This address distinguishes the virtual location of a particular subscriber at a certain point in time. Connecting through an intermediary, basically a proxy server, hides the identity. The intermediary knows the IP address of its clients but provides them a new address and online behavior can only be related to this new address. The file sharer has to trust the intermediary that no information is stored or given away. A Virtual Private Network (VPN) client offers such paid services. Another option lies in setting up a seedbox to engage in P2P file sharing. Illegal material is loaded onto a virtual private server (VPS) and the own IP address is only used to connect to that server. The risk lies in the server provider, from where information about the file sharer could be obtained (FileShareFreak 2008b). Especially those who pay for VPN and seedboxes to contribute to file sharing via BitTorrent might be key pillars for those networks to function after all. Only relatively few peers are responsible for the major share of the upload (seeders), most peers simply download (leech) (Strahilevitz 2003). In a way, these are the worst criminal pirates. But at the same time those peers are the most tech-savvy and know how to disguise their identity online. Since these users pay to access music online, new models should include these users as well.²⁹

Moreover, several surveys have found support for a high WTP for music among file sharers. The logic is simply that music enthusiasts are highly involved in music. Once this "life-style choice of certain groups of society" (Andersen and Frenz 2010: 735) is made they use all available means to consume music. Investigating Canada, Andersen and Frenz (2010) find that different income levels do not affect CD purchasing. The authors conclude that the budget share for music consumption is too small to affect buying behavior (see also Andersen and Frenz 2007, 2008). A survey comparing Germany and the US finds that "P2P file sharers, in particular, are heavy legal media consumers. They buy as many legal DVDs, CDs, and subscription media services as their non-file sharing, Internet-using counterparts. In the US, they buy roughly 30% more digital music. They also display marginally higher willingness to pay" (Karaganis and Renkema 2013: 5).

²⁹For a notable discussion among file sharers whether paying for file sharing defeats the purpose or is legitimate as file sharers would willingly pay for a sound legal alternative (but paid file sharing still outperforms legal options) see "Alright Reddits, It's about time we had a talk about seedboxes," post on reddit.com by UsenetMasterRace on April 14, 2011. In the post, UsenetMasterRace asks: "Is there a legitimate service where you can pay \$15/month to download as much as you want of anything you want? Because if there is, I want it" (http://www.reddit.com/r/Piracy/comments/gpw7e/alright_reddits_its_about_time_we_had_a_talk/, April 22, 2013). Since March 2012, Spotify is able to challenge this demand, offering DRM-protected music also for offline-use for a monthly fee of \$9.99 (respectively €9.99, £9.99, and other currencies). The fee is halved without the option to offline-use.

Those challenging music lovers' high WTP might be convinced by the surge of concert ticket prices. Krueger (2005: 1) finds that "from 1996 to 2003 [...] the average concert price increased by 82%, while the CPI increased by 17%."³⁰ Examining the younger generation in the UK aged between 14-24, file sharers state they would pay for legal models once those reach a certain quality and that they would continue to "own" music beside using a streaming service (Bahanovich and Collopy 2009, 2013). Most likely, they try to get involved in private trackers to benefit from the community and operate a seedbox, a private server (local or remote) used for up- and downloading files.

This section has shown that despite the pervasiveness of file sharing, file sharers have a considerable WTP for music content that new models can exploit. However, with their aggressive behavior and lacking legal alternatives, the majors further motivate key file sharers to engage in and improve illegal communities.

1.4.2 Why File Sharing Still Beats Legal

As shown above, the music market is focused on hits. Mass-marketing, advertising and distribution, determines and homogenizes mass taste. The majors traditionally supply this mass market, aiming to sell their latest content at high prices while the marketing machinery creates the necessary hype. But precisely because the mass market concentrates on a limited number of hits, file sharing simply substitutes conventional distribution channels. In a decentral file sharing infrastructure, only one member has to inject content so that all other users receive identical copies. Traditional music distribution was inherently valuable as it guaranteed access. Now that technological change has reduced marginal costs of distribution to zero, distribution has lost its inherent value. Thus, a first important point is the pure access to music. A second point is access to a huge variety of music, including rare content. In the former physically constrained music distribution, older and niche music was often no longer or not at all provided by the majors as profits were higher selling new content (Anderson 2006). For real music enthusiasts the music itself ranks higher than its profitability. Having difficulties to find their desired music in mainstream record stores, they went underground.³¹

³⁰See figure 1 in Krueger (2005: 7) for a more detailed split between high, average, and low ticket prices. ³¹One might also argue that audio quality plays a certain role. Many file sharing communities offer lossless digitized music. Lossless compression is "a bit-exact replica of the original digital audio data" (Brandenburg 1999: 2). Any other compression is lossy (see, e.g., stereophile 2008: for an overview of audio compression). Whereas some vendors opt to price discriminate for higher quality (like beatport, specialized on electronic dance music), mainstream marketer Apple-iTunes sticks to 256kbps (kilobit per second) AAC (Advanced Audio Coding). To be sure, lossless quality would not benefit many consumers who prefer smaller, easily manageable files (downloading, copying); whose audio equipment at home or even their ear would not be able to make the difference (Ars Technica 2011). But with the decision for

After initially ignoring technological change, the majors later responded only hesitantly to the demand for digitized music. For example, although Apple launched its iTunes Music store already in 2003, the catalog was limited to 200,000 songs, protected by DRM (digital rights management), it initially cooperated only with major labels, was compatible only with Apple's hardware, and was available only in the US. Even though Apple removed these restrictions over time and certainly made a huge contribution with it's convenient jukebox-software that attracted new demand to digitized music (Ars Technica 2012a). In light of the (initial) shortcomings, file sharing remained the more attractive alternative for music distribution. The twofold consequence was that file sharing infrastructure was built and improved and that especially young music consumers grew up in a reality of file sharing (Jensen 2003). Even though online music retailer and music streaming services like Deezer or Spotify now provide convenient access to a huge music library, the culture of file sharing will only change once legal alternatives become more attractive than file sharing.

The key argument in favor of file sharing, however, is the genuine experience and the objective information and recommendations for the discovery of new music. Given the domination of the majors over the mainstream market and the late provision of access to digitized music, curious music enthusiasts were practically forced underground. Considering the diversity of the whole music market, reliable information about niche music is essential. File sharing itself is not centrally organized, does not follow economic incentives and can thus be genuinely about music.

The majority of file sharing takes place on cyberlockers or public BitTorrent trackers. Forum $posts^{32}$ or topical blogs (for a fantastic introduction see The Awl 2012)³³ linking

lossless, the mainstream market would address music enthusiasts and include those music lovers who until now are supposedly particularly active in file sharing communities. Nonetheless, the strength of new music distribution models lies in their usability and convenience. To be sure, current bandwidth does hardly allow for CD quality streaming in a mass market. Convenience will here win over top audio quality. For example, Spotify offers three settings from 96 kbps to high 320 kbps for its premium users (see "What bitrate does Spotify use for streaming?" on https://support.spotify.com/us/learn-more/faq/, May 30, 2013). Deezer apparently follows the same model of 320 kbps for premium users (http://www.deezer.com/en/offers/premiumplus, May 30, 2013). Real music enthusiasts with a preference for highest music quality will likely continue to purchase CDs (Andersen and Frenz 2010).

³²One example is the former web-forum "FileSoup" founded in 2003 on which users posted also links to copyrighted material (not only music). In 2009, the site was shut down, the administrators were arrested and their homes raided. However, the courts dropped the charges in 2011. Some argue that the plaintiffs did not understand the technology and the UK enforcement followed the plaintiffs charges without investigating themselves (Masnick 2009a, 2012b, TorrentFreak 2011, 2012c).

³³Countless blogs exist, for instance, IsraBox.com; the site went online in 2006 and attracts users stating that they can "download free music for review [... and] also you can download free music albums. We present new items of music and the hot hits" (http://www.israbox.com/, June 4, 2013). Notable blogs for special interest include Mutant Sounds, 8 Days in April, Systems of Romance, Awesome Tapes from Africa, Italia Und New Wave, The Thing On The Doorstep, or Fantod Under Glass. Each blog links

to music stored on cyberlockers or via torrent-files can offer good recommendations but do not enable peers to communicate intensively. Of course, music fans could simply discover music over those platforms and then buy it legally somewhere else. But this would be an extra step incurring more costs. As both cyberlockers and public trackers are public, they can be found and taken down rather easily and therefore have a relatively short life span. The most sophisticated file sharing communities are private trackers. Reliable information about these trackers is limited to insider or leaked information which complicates research on the topic.³⁴ One exception is the private BitTorrent tracker "Oink's Pink Palace" (OiNK) as its shutdown in 2007 was covered by the media (see below). Founded in 2004, the invitation-only platform must have provided an impressive infrastructure for music enthusiasts. For its community of 180,000 users, OiNK hosted an exquisite music library of 200,000 files allowing for 21m downloads (BBC 2010b,a). Note, that files here translate into albums not single songs, which multiplies the number of total songs.

Trent Reznor is the founder of the popular rock band Nine Inch Nails. One would assume that – as a famous artist – he sides with the majors but he was himself an OiNKmember. In a 2007 interview he highlights the superiority of this illegal platform over legal alternatives of the time such as iTunes and emphasizes that the industry does not serve the music fan-base by filling this gap:

"What made Oink a great place was that it was like the world's greatest record store. Pretty much anything you could ever imagine, it was there, and it was there in the format you wanted. If OiNK cost anything, I would certainly have paid, but there isn't the equivalent of that in the retail space right now. iTunes kind of feels like Sam Goody³⁵ to me. I don't feel cool when I go there. I'm tired of seeing John Mayer's³⁶ face pop up. I feel like I'm being hustled when I visit there, and I don't think their product is that great. DRM, low bit rate, etc. [...] People on those boards, they're grateful for the person that uploaded it — they're the hero. They're not stealing it because they're going to make money off of it; they're stealing it because they

³⁶ John Mayer is an American singer-songwriter, pop rock musician and producer. See The Wall Street Journal (2007) on how iTunes exposes selected music and pushes for exclusives.

to numerous other blogs. A quick search via Google on June 4, 2013, reveals sites such as Audioloot, calamarfarci blogspot, Solidboy Music Blog specialized on Rock music, Lossless Album offering only lossless digitized music, or Loadown for heavy metal. As the respective web hosting service takes sites down by request of copyright holders, such blogs can have a relatively short life span.

³⁴However, members of the file sharing community obviously have difficulties staying underground. Be it for their urge to communicate their convictions about file sharing or just the pride of belonging to an illegal circle. For example, on the website torrent-invites.com, private trackers are discussed and presented in depth. Detailed screen shots demonstrate the sophistication of the communities. ³⁵Former music and entertainment retailer operating in the UK and the US.

love the band. I'm not saying that I think OiNK is morally correct, but I do know that it existed because it filled a void of what people want" (Vulture 2007).

It should be highlighted that Reznor is particularly friendly to file sharing and successful giving own content away for free (Masnick 2010c). The band is even known to share their music themselves on public and private trackers (TorrentFreak 2008a). While his view does probably not represent the majority of famous musicians,³⁷ his statement gives valuable insights into the logic behind a file sharing platform and the motivation of its members.

A search engine filtered the huge torrent library and users could choose between different formats of audio quality. Moreover, the platform allowed users to communicate with each other and discover new music. The benefits from OiNK were sufficiently high that users were willing to bear the above mentioned costs of file sharing. Indeed, the community was strong enough to enforce rigid rules regarding quality and labeling standards of shared content, strict upload/download ratios, and even what avatars to use (WIRED 2007a).³⁸ In this connection it shouldn't be forgotten that membership in a community like OiNK carries inherent value. The affiliation to a privileged club can be a precious. A valid objection against any sort of commercial model is that it might face difficulties challenging this club quality. However, music enthusiasts will certainly appreciate that new models design a fair compensation system for artists.

To sum up, the existing file sharing infrastructure is still more attractive to the consumer than conventional legal alternatives. This cannot be ignored by the majors, including the authenticity of illegal file sharing communities. In order to compete with this structure, new models of distribution have to provide a better service to the consumer, so that she voluntarily opts for the legal model. As the next section shows, such models are possible right now.

1.4.3 Superior Usability of Innovative Models: Access and Discovery

As has been shown above, file sharers are willing to pay for music and that contemporary services already grant access to a huge music library. New models can successfully compete with this infrastructure when they fully exhaust the technological potential. The goal of new models has to be the provision of the best user experience. In short, new

³⁷The Rock band Metallica was strongly opposed against file sharing and amongst the first to sue Napster. More recently they acknowledge to have "underestimated" file sharing (Billboard 2010, Masnick 2010b).

³⁸ The full OiNK rules can be found on http://home.arcor.de/coink/oink_rules.html, April 18, 2013.

models have to eclectically implement the advantages of the file sharing community into their infrastructure and to offer this at a competitive price.

The first basic innovation lies in instant access to a conveniently explorable music library. File sharing infrastructure still centers on *downloads*. This replicates the conventional business model in that consumers have to possess the music they listen to. Consumers first have to download and locally store music on a medium. Downloading implies a time lag. Even the most sophisticated file sharing infrastructure requires to download and store a copy and then open this copy with a media player. Moreover, the user has to organize the music to later retrieve songs. Managing a huge library incurs further costs just like organizing CD or vinyl racks.

Given the zero marginal cost of distribution for single music tracks and the increase in Internet bandwidth, streaming services can provide instant access to a huge music library. There is no reason why such a library should not include every existing song. All musicians should be interested in placing their music in such a service. The higher bandwidth permits streaming in high MP3 quality. Instant access means that music starts playing once a song is clicked on which is clearly favorable to current file sharing. Combining a streaming service with a temporary storage opportunity is central so that users can enjoy their music also offline and most importantly on portable devices. Yet, streaming content directly from the Internet frees users from the obligation to reserve disk space for their music (Thomes 2011). Free streaming services like YouTube already offer a huge library. However, they do not provide the convenience of a thoroughly organized library. Streaming services divest the user of the responsibility to manage her library still allowing her to extend the default order through customization. Streaming high music quality to an end device finally clears the issue of a sampling effect (see on customized streaming Peitz and Waelbroeck 2005). Users don't commit themselves to buy but can try music before a purchase. Users who still prefer the haptic or higher quality of CDs or vinyl will probably continue to purchase those carriers in addition to a streaming service. This goes in line with the finding of Andersen and Frenz (2010) that access to digitized music not necessarily displaces purchasing behavior for music. The possible switch from possessing to merely accessing music simply because the latter provides a higher convenience (NPR Music 2012a) might become the greatest change in music consumption since the digitizing of music (Thomes 2011).

The key surplus value, however, lies in discovery. Recommendation systems are able to match music to an audience (for a fantastic overview see variogr.am 2012).³⁹ The

³⁹Such attempts date back to 1997, when online music retailer MP3.com implemented an early music recommendation system based on user data. MP3.com was sued by the majors only nine days after it

distribution system carries inherent value. Such systems can revolutionize the music market in that consumption is no longer streamlined by the marketing of the majors. Consumers can develop very individual taste and the distribution system helps to feed the input for this taste. Recommendation systems work in three basic ways: content-based filtering, collaborative filtering, and a combination of both. Content-based filtering pools artists through objective criteria like genre or rhythm and by mere popularity. Involving the users, collaborative filtering collects and analyzes user data including their listening patterns and preferences, generating recommendations based on similarities to other users (Breese et al. 1998). Hybrid systems combine both methods (Adomavicius and Tuzhilin 2005, Ricci et al. 2011, TIME Magazine 2010, see also Celma and Serra 2008).

Given the emotional character and cultural dimension of music, it can hardly be fully quantified. Of course, trivial sorting via genre or year is a helpful first step. An employed team of selected music experts could also better categorize a respective catalog than relying on machines only. But including the "swarm intelligence" of audiophile consumers in collaborative recommendations is ultimately superior. Decentral detailed knowledge joined with fascination for a given musical niche is the best guarantor to successfully organize a huge and complex library.⁴⁰ Such recommendations build on the possibility that technological change allows users to display their musical knowledge and culture. For example, they can demonstrate own skills and knowledge by generating compilations in the form of playlists. Such playlists could introduce a niche by providing a broad overview. Users could rate and modify the playlists ex post as to whether they properly represent the niche.

Ideally, sophisticated music enthusiasts can be attracted to fulfill such tastemaker positions and function as multipliers. Moreover, only a critical number of users is needed to make the model work, especially those audiophile tastemakers who can function as multipliers and provide orientation. Potentially, they might even be interested in contributing their special knowledge about artists (similar to an editable wiki as on the online encyclopedia wikipedia). This includes tour and concert dates, even allowing members of the network to group up according to their musical interest. Today's service Last.fm already allows users to edit the information about artists themselves. At this point, a legitimate concern is the integrity of such tastemakers. Content providers will seek influence to forward their own product and many might even be happy and with sufficient capital to provide attractive material incentives. However, decentral diversity might re-

had launched its service (Lessig 2005: 189-191).

 $^{^{40}\,\}rm Note$ that the younger UK population Bahanovich and Collopy (2013) states "friends" as the most important source for music discovery.

solve this issue. Due to the fact that there will be many such tastemakers available on a diversified market, the relative power of one single tastemaker is negligible. Moreover, a good reputation for reliable recommendations will be lost once users find a tastemaker to be corrupt. Finally, many tastemakers will be intrinsically motivated to share their fascination with other users.

Still more important is a feature to conveniently discover music similar to one's taste. To achieve this, similarity has to be defined. The concrete appearance of a recommendation system with the goal to discover artists can and should be kept simple and intuitive to keep complexity low. File sharing forums report, that private trackers had such a visualization already in 2008 (FileShareFreak 2008a). Figure 1.2 shows how the "Similar Artist Map" of the private tracker "What.CD" - a direct successor of OiNK (FileShare-Freak 2008c) – intuitively visualizes and clusters similar artists.⁴¹ The advantage of the system is that it requires the customer to only know her favorite artist in order to discover related music. A list of related artists is displayed next to the map. Interested peers feeling competent enough can vote to increase or decrease artist similarity, hereby creating the map. Metadata clusters artists to groups of higher similarity. The list should be kept short to keep complexity low but should include an option to add new artists which could remain in the list for a certain time. Genres and sub-genres could be similarly organized. After investigating the current legal streaming services, some display a small number of similar artists but not a single one provides a similarly intuitive and effective tool for music discovery. An illegal community is financed only through donations and built and maintained through voluntary work. If it can already provide such a sophisticated recommendation system, a commercial model can easily replicate this.

Illegal file sharing communities are ephemeral. User involvement is thus relatively low since users have to be afraid that their engagement will vanish once the community dies. Constantly threatened by legal consequences, they have to limit the number of members which also limits the number of users who could provide helpful information. The current file sharing systems suffer from a time-lag in that content takes time to download before it can be listened to. A legal streaming system solves all these issues. Users can feedback on content while actively listening to it. The potential number of users is unlimited. Once streaming services go global, they can include and benefit from music and knowledge from all over the world. Since the nature of a legal system can be long-term, users do not have to fear that their engagement will disappear.

⁴¹For a legal visualization effort, see the independent project "global network of dreams" (Gnod) by Marek Gibney on http://www.gnod.net/ and figure 1.3 in the appendix. However, Gnod cannot rely on the number of users and the scale of user data any legal model could provide.



Figure 1.2: Recommendation System of the Private Music Tracker "What.CD" Left: Similar Artists Map of The Rolling Stones; groups of similar artists are clustered (FileShareFreak 2008a) Right: List of similar artists, apparently to a punk band; peers can vote [+] or [-] to determine similarity (FileShareFreak 2008c)

One might ask if and why users would have an interest to contribute. Even if recommendation systems are kept intuitive and simple, why would users bother or be interested in communicating their private music interest to the outside world? True, not all users are interested and privacy might be a concern. Still, music taste is not the most delicate private matter. Furthermore, it is traded in for valuable improvement of musical experience, at best embedded in a community. Finally, the degree of publicity could be self-determined. Since only a certain number of users is necessary to make the model work, opt-in options are possible while listening data is kept anonymous. Recommendations build reputation which is a public good that benefits all users. Functioning reputation mechanism of other Internet companies show that today's Internet users have understood the usefulness and value of such systems (Botsman and Rogers 2010).

Some will object that such a system might be corrupted by fake votes, i.e. by intentionally influencing the position of an artist into a direction she does not objectively fulfill. Although a recommendation system in this context is more complex than music charts, this is the same as buying songs of an artist to the extent that she enters the charts.⁴² Two reasons are likely to work against the success of such fakes. First, the

⁴² A remarkable example of chart manipulation is the song "Ding Dong! The Witch Is Dead" of the 1930's movie "The Wizard of Oz." In the week of Margaret Thatcher's death, the song entered the UK music charts in 2013 as second. A 2007 online campaign asked to buy the song in exactly the week in

sheer volume of votes over time requires high efforts for continuous fakes. Second, the system would be able to identify and blacklist those voters who constantly vote against the majority of voters.

Moreover, recent development plays in the hands of this new model: technological change allows to shift conspicuous consumption (Veblen 1899) into virtual space. For example, posting about a promotion or vacation in online social networks like Facebook increases attention and appreciation (World Economic Forum 2010).⁴³ As soon as new models successfully implement the social network dimension, musical sophistication will also be exploited to demonstrate expertise, seeking social recognition and prestige. The legality and long-term nature of such models will leverage the positive effects of user recommendations allowing for a greater public audience for self-presentation. It is well possible that artists and especially disk jockeys might enhance their prominence through well chosen playlists. The tastemaking influence – and promoting possibilities – such a new model would give to a famous radio disc jockey like the BBC's deceased pop music expert John Peel should only be mentioned.⁴⁴ Especially for the confusing complexity of the contemporary music world, such tastemakers are necessary.⁴⁵ Indeed, new recommendation systems have the potential to significantly reduce the problem of attention economics. Moreover, functioning as a democratic discovery tool for niche music, they essentially create awareness for Anderson's long tail. This structure allows to re-diversify the music market integrating more musicians. At this point, it cannot be definitively said whether single musicians will make significant money from the royalties generated by the new model. There is still heated discussion about whether streaming services forward a fare share of the subscription revenues to the artists or whether streaming comes closer to listening radio or purchased songs (see on Spotify Forbes 2013 and subsequent discussion). Thom Yorke, known as frontman of the group "Radiohead", has particular concerns against streaming services like Spotify and did not provide the service with his music (Sopitas 2013, The Guardian 2013c). More importantly, however, the model creates important awareness to build on.

This section has shown that, given today's technology, file sharing only exists to such an extent because of the majors' hesitation to innovate and open up for new business

which the former UK Prime Minister died (BBC 2013b).

 $^{^{43}}$ Going so far that according to recent research, "Facebook makes users envious and dissatisfied" (Krasnova et al. 2013).

 $^{^{44}\}mathrm{As}$ a BBC Radio 1 DJ, Peel's regular programs from 1967 until his death in 2004 were known for their eclectic taste.

⁴⁵ For example, New York-based DJ Tim Sweeney hosts his dance-music radio show "beats in space" for now almost 15 years (see, e.g., his 2009 biography on online electronic music magazine Resident Advisor http://www.residentadvisor.net/dj/timsweeney/biography, May 15, 2013).

models. Instead of moving with the times, learning from file sharing communities, and exploiting the possibilities of innovative legal models inspired by the illegal culture, the majors declared war on it as the next section presents.

1.5 The War on File Sharing and its Effects

The official motivation behind the war on file sharing is the undoubtedly honorable endeavor to save the music industry and thus music as such (RIAA 2013). The music business as such, so the line of the argument, depends on payments for recorded music for which file sharing offers a free substitute. The war on file sharing is targeting basically two enemies. On the one hand, the majors aim to prohibit technological means of file sharing. On the other hand, they intent to deter private individuals from file sharing. Although legislation varies over countries, one general approach to file sharing seems common: both providers and users of file sharing technology face civil and criminal law charges. The concept of copyright infringement encompasses the participation of both groups in file sharing. File sharers commit copyright infringements by making copyrighted material available for other users online with a non-commercial interest. This can give reason to both criminal charges as well as claims under civil law, e.g. as a tort leading to a claim for damages. Technology, obviously, does not infringe copyright "by itself" but enables users to access and share copyrighted material as an intermediary. Providers of technology are thus accused of contributory infringement

As this section will show, even though the majors achieved some of their goals, ultimately the war is a defeat. With regards to technology, the war is either caught in legal uncertainty and a Sisyphean struggle against a population of programmers. Or, it fights a Hydra in that every triumph multiplies and strengthens the enemies. With respect to the deterrence of private individuals, the majors not only provoke bad press and jeopardize their public image. They also increase public awareness of file sharing software and companies which benefit directly from file sharing. Furthermore, the war provokes the file sharing community, motivating it to better hide its activity and improve illegal infrastructure. In consequently pursuing their war, the majors lobby for ever closer monitoring, fundamentally threatening Internet privacy and herewith the integrity of the Internet as such. And since the majors do not offer attractive legal alternatives to file sharing, music fans go underground to spend their money.

From the early days of file sharing, the majors lobbied to define it as illegal. Even though legal uncertainty persists, current law predominately understands file sharing as the infringement of rights of copyright holders. While commercial unauthorized repro-

ductions have never been disputed, also noncommercial reproductions have been declared illegal (Depoorter et al. 2011). A following easy task for the majors was to target centralized file sharing infrastructure in the case against Napster.⁴⁶ Napster was a central server-based file sharing platform. Even though only the users of Napster did violate copyright, the US Ninth Circuit saw the argument for the illegality of the platform in contributory liability. With regards to file sharing this liability for contributory infringement initially implied providing the infrastructure. However, when users turned to decentral file sharing using software like Grokster or KaZaa, the US Supreme Court widened the definition. Reversing lower court rulings, the Supreme Court holds software companies accountable when they actively invoke infringing uses such as advertising.⁴⁷ Accordingly, file sharing today takes place within decentral networks, mainly over the BitTorrent protocol (P2P) or via cyberlockers which offer services that cannot be linked to only sharing files illegally.

1.5.1 Prohibiting Technology

Digital Rights Management is a first approach trying to prohibit file sharing at the source by preventing the possibility to extract the digitized content from a carrier and to create a copy. While this might still work for software which requires periodical communication with the producers' servers for updates, it failed for music. Biddle et al. (2002) report that the complete range of DRM has been broken so far, turning DRM into an expensive Sisyphean task for the industry. Given that users can communicate in real time over the Internet hardly any DRM-protection can be BOBE (break-once, break everywhere)-resistant.

Of course, better DRM might be invented in the future. But until then DRM ruins the attractiveness of legal products.⁴⁸ To prevent file sharing, DRM usually forbids full access to the content and thus copying. However, this includes copies for legitimate owners who run into problems when they want to backup music, migrate it to a new computer, or burn a CD-copy for the car (Biddle et al. 2002). As a matter of fact, the limitations to use legitimately bought content can become Kafkaesque: the press wrote about US actor Bruce Willis who considers to sue Apple for the rights to his iTunes music collection after his death (The Sun 2012, SPIEGEL ONLINE 2012). Indeed, in iTunes's current business model customers acquire certain limited rights of use rather

 $^{^{46}{\}rm A\&M}$ Records, Inc. v. Napster, Inc., 239 F.3d 1004, 1022 (9th Cir. 2001).

 $^{^{47}\,\}mathrm{MGM}$ Studios, Inc. v. Grokster, Ltd., 545 U.S. 913 (2005).

⁴⁸ For example, regarding a former approach to copy-prevention techniques for CDs, Halderman (2003: 1) concluded that "these schemes are harmful to legitimate CD owners and will not reduce illegal copying

in the long term, so the music industry should reconsider their deployment."

than property rights enabling them to re-sell or inherit paid-for content – something completely common in the past.

The BitTorrent Protocol is a second column. The majors target companies that provide file sharing software or engage in business that financially benefits from file sharing. But software to copy and transfer files is essential for a working legitimate economy.

A famous example for illegal P2P file sharing is the public BitTorrent tracker The Pirate Bay (TPB), founded in Sweden, 2003 (Carrier 2010). Since the site operated out of Sweden,⁴⁹ a total of 14 film- and music-production companies and representatives of gaming-software and -products owners concerted with the Swedish Public Prosecutor's Office. In early 2008, Swedish prosecutors pressed charges against the individuals behind the site: the three TPB founders, Fredrik Neij, Gottfrid Svartholm, Peter Sunde, and Swedish business man Carl Lundström, who materially and financially supported TPB in the beginning. The four were accused for administrating, hosting, and developing the website and thereby facilitating other people's breach of copyright law (CURIA 2012, Computer Sweden 2008).⁵⁰ In addition, the site's profitability was taken into consideration (CURIA 2012, Ars Technica 2008b). The defendants argued that they only function as a platform where users can post and find torrent-files. In doing this, their site is not different than Google's web search engine. But TPB links torrent-files only. Even though the defendants had been informed of the infringing activity by copyright holders, they made no efforts to prevent it. In January 15, 2010, after a first appeal, the defendants were found guilty of complicity in infringing copyright legislation and sentenced to prison terms up to one year and high fees (CURIA 2012), amounting to a total of 30m Swedish krona (\$4.4m) (PC PRO 2010).⁵¹ Even though the website was temporarily shut down and subsequently blocked in many different countries, it remains accessible until now.⁵² While the founders present themselves as altruistic freedom-fighters, plaintiffs held the

 $^{^{49}}$ Note, that the initial copyright infringement, the injection of copyrighted material, did not necessarily take place in Sweden. TPB was merely the public source to *access* the content.

⁵⁰ "In terms of its substance, the case addressed the issue of the liability of an intermediary managing a website for the illegal downloading of streaming files (torrent files). It pertained, inter alia, to Directive 2000/31/EC on certain legal aspects of information society services and on the interpretation of Articles 12 to 14 thereof" (CURIA 2012).

⁵¹For the sake of completeness: the initially higher prison sentences were at one year each and the combined fine amounted to SEK46m, approximately \$6.7m. See Supreme Court of Sweden (Högsta domstolen), February 1, 2012, Case number B 5880-10. A second appeal, the request for leave of appeal to Swedish Court of Appeals (Svea hovrätt), November 26, 2010, Case number B 4041-09, was denied. The initial judgment was: Stockholms tingsrätt, April 17, 2009, case number B13301-06.

 $^{^{52}}$ See http://www.thepiratebay.se. A random check on TPB on April 17, 2013 at 4PM listed the following numbers: 6,222,016 registered users, 71,027,280 peers, which separate into 54,801,695 seeders (uploaders) and 16,225,585 leechers (downloaders) in 4,893,584 torrents.

site be very lucrative through merchandise, donations, but especially advertising. Advertising revenues flowing in from, among others, well-known international corporations like "BT, Tesco, Sky Bet, the National Lottery – even MI6" (The Guardian 2013b) and might have added several thousand US\$ per month (true amounts are still controversial).

The notorious private BitTorrent tracker OiNK was also profitable. Even though payment was not mandatory, the site received up to \$18,000 per month in user-donations (BBC 2010a). OiNK was shut down in the international "Operation Ark Royal." On October 23, 2007, after a two year investigation, the IFPI, the BPI, the Cleveland (U.K.) police, and the Fiscal Investigation Unit of the Dutch police in cooperation with Interpol closed down the Amsterdam based private tracker, which had been particularly targeted for offering pre-release material. Alan Ellis, born in 1984 in Leeds, who operated the tracker from his flat in Middlesbrough from 2004 until it was closed down in 2007, was accused of conspiracy to defraud.⁵³

The IFPI London (2008: 3) proudly announced that shutting down the "Worlds largest pre-release pirate music site" with approximately 180,000 members demonstrated "how the recording industry can work with law enforcement agencies to prove that illegal operations on the internet [sic] are not immune from detection." However, none of the OiNK users was legally charged, let alone sentenced. This even includes the site's operator Alan Ellis. Ellis claims he never intended to defraud copyright holders, that the site was merely a platform which he built to further and improve his skills for employability, and that he used the money to maintain and improve the site. In 2010, the jury found him not guilty of conspiracy to defraud at Teesside Crown Court (R-v-AE, BBC 2010a, GazetteLive 2010).

After the accusations, Ellis lost his job as an IT consultant and his bank accounts were frozen. What might have convinced the jury, following defense barrister Alex Stein, was that the IFPI monitored and studied OiNK for three years but never asked Ellis to shut it down. The IFPI's Anti-Piracy Manager Mumith Ali first became aware of OiNK in 2004. Ali became an OiNK member under several pseudonyms "who investigated in a covert way the Oink website, logging on as though he were an ordinary user", did "50 to 100" downloads and also requested albums but "had not sent any warning notices or anything of that nature to Oink."⁵⁴ Stein accuses the IFPI of dishonesty arguing that "their own members used this site to promote their own music" (GazetteLive 2010).

The majors still misunderstand that technological change requires structural reactions.

⁵³See Regina v. Alan Ellis, Teesside Crown Court, Case No: T20087573, January 15, 2010, hereinafter R-v-AE; see also MTV NEWS (2007), The Guardian (2007).

 $^{^{54}}$ See page 18 of the transcript of the last day of the trial in R-v-AE.

Again regarding the shutdown of the private tracker OiNK, the BPI stated that Alain Ellis "made nearly £200,000 [approximately \$327,000] by exploiting other people's work without permission. The case shows that artists and music companies need better protection" (OS news 2010). Prosecutor Peter Makepeace complains that Ellis "hadn't sung a note, he hadn't played an instrument, he hadn't produced anything. The money was not going to the people it rightly belonged to, it was going to Mr Ellis" (BBC 2010b). Besides Makepeace's obvious misunderstanding of Ellis not "producing" anything, and his questionable interpretation that money went – in the conventional model – "to the people it rightly belonged to", Ellis's product appears quite different in light of technological change. He matched a sound product with solvent demand and ran a professional music distribution platform. A demand the majors chose to ignore.

In comparison, would the industry still dare to blame a business model like the Google's web search engine, iTunes music store, or a streaming service like Spotify to "exploit other people's work"? Without a doubt, new players on the market now claim rents that traditionally went into the majors' pockets (The Wall Street Journal 2007). For example, the Brooklyn-based online music distribution service TuneCore, launched in 2006, places artists' music into online retailers and streaming services – for a flat yearly fee per music unit (e.g. single or album). Leaving all copyright with the artists, this model proves the potential of alternatives to the conventional model.⁵⁵

The "songwriters, recording artists, audio engineers, computer technicians, talent scouts and marketing specialists, producers, publishers and countless others" (RIAA 2013), which the industry claims to defend (Bishop 2004), would most likely now benefit from a greater share if the music industry itself had forwarded such inventions earlier. Even worse, the war is very costly. As N.Y. business lawyer Ray Beckerman (2010) claims in his blog, in the period from 2006 to 2008 the RIAA spent roughly \$64m to recover \$1.36m. This is, of course, not the whole calculation. Revenues from successful deterrence have to be taken into account, too. But industry claiming to fight for its cultural product, music, might be better advised to invest this money providently – and into its artists.

Much worse for the industry, on the day that OiNK closed, multiple new private trackers emerged practically instantly and continue to emerge all the time (TorrentFreak 2007, Masnick 2009a). The total number is hard to guess, especially since the illegal communities hide underground and many trackers are in languages other than English. For example, on April 18, 2013, the site torrentking.org listed 87 music trackers which require "signup" and are thus likely private trackers. Some trackers are offline but on the

⁵⁵See http://www.tunecore.com/index/how it works, May 20, 2013.

other hand the list is not complete. For 2009 (December 17), the site FileShareFreak listed 81 private music trackers which are not artist specific.⁵⁶

Technological issues render the position of the majors more difficult. While the offer of a song via the BitTorrent protocol can be identified relatively clearly, it is much harder to clearly determine the harm of this individual infringement, as especially the substitution effect is controversial (van Eijk et al. 2010). However, copyright holders are not legally obliged to prove concrete damages and can opt for statutory damages (Cross 2010).

Cyberlockers are very controversial regarding their provision of infrastructure. Given their importance for legal use, they do not count as illegal in the most cases. In the case of Swiss-German file cyberlocker RapidShare, the German Düsseldorf higher regional court found that "most people utilize RapidShare for legal use cases." Assuming otherwise invites "a general suspicion against shared hosting services and their users which is not justified."⁵⁷

A notorious possible counter-example is Kim Schmitz (better known as Kim Dotcom)⁵⁸ and his FBI-seized website Megaupload. Living in New Zealand, Schmitz was placed in custody in January 2012. The case against him is still pending (Gruley et al. 2012). New Zealand's authorities responded to US charges of criminal copyright infringement related to Megaupload (US Department of Justice 2012). Parloff (2012) argues that the site provided infrastructure copyright infringement and provided monetary incentives for users to upload content for others in order to leverage network effects.⁵⁹ While the profitable site was shut down on January 19, 2012 by the United States Department of Justice,⁶⁰ Schmitz launched his new site MEGA only one year afterwards (www.mega.co.nz). Schmitz claims the steps against him are driven by US media companies. New Zealand's prime minister John Key publicly apologized to Schmitz since his communications have been illegally monitored by the government. Even the raids on his home were apparently illegal which is why the police has to return at least some of the evidence secured during the raids (The Guardian 2013a). Notably, industry representatives clearly stated no

 $^{^{56}}$ See http://filesharefreak.com/2009/12/17/complete-list-of-private-music-trackers-by-category, May 5, 2013.

 $^{^{57}}$ Atari Europe S.A.S.U. v. Rapidshare AG, OLG Düsseldorf, 22.03.2010 - I-20 U 166/09. For the English quotations see gigaom (2010).

⁵⁸Schmitz is enjoying his media attention, his video "Kim Dotcom - MegaChristmas" is a perfect illustration (see http://www.youtube.com/watch?v=c 2KezhSPg0, April 30, 2013).

⁵⁹Gruley et al. (2012) report "To earn rewards, users had to put up files—and the material had to be popular enough to generate at least 50,000 downloads within three months. Megaupload initially offered cash bonuses of up to \$5,000 for uploaders who generated the most downloads, later increasing it to \$10,000. One uploader made \$55,000, the indictment says." Of course, this holds for similar companies as well and is one of the rare ways how users can benefit monetarily from file sharing.

⁶⁰ All data was apparently lost in the raids to the great disadvantage of many legal users (see, e.g., the BBC on http://www.bbc.co.uk/newsbeat/16855279, May 25, 2013).

interest to sue individual users (WIRED 2012c) and to the day no user of cyberlockers has been sued.⁶¹

Although the action against Megaupload was predominantly driven by motion picture companies, the example emphasizes the strong determination of media companies to fight file sharing. However, the attractiveness of file sharing also proves that no alternative exists. Other agents fill this gap – and take the money. Whereas many other platforms and websites were closed, for every take-down, several new sites emerge practically instantly. This turns the fight against software and companies into a costly Sisyphean task, which will not end as long as legal alternatives remain inferior to illegal platforms. On April 18, 2013, Wikipedia listed 28 different file hosting services with the possibility to share files.⁶² The real number is probably higher.

1.5.2 Deterring Humans

In September 2003 the RIAA started suing private individuals who made larger amounts of music available to other peers. Internet Service Providers received subpoenas requesting the names of those individuals, settlements averaged at \$3000 (PCWorld 2004). Until 2008, the majors sued more than 17,000 US individuals.⁶³ While the high numbers of defendants sound like a success, the campaign turned out as very bad press for the plaintiffs. Two examples are particularly notorious: (1) Capitol Records sued Jammie Thomas, single mother of two, for sharing twenty-four songs.⁶⁴ In 2007, she was sued for \$220,000, but the amount went up to \$1.92m in 2009; before it was reduced back to its initial sum in 2012 (see WIRED 2007b, 2009a, 2012a). (2) Sony BMG ordered Boston University graduate student Joel Tenenbaum to pay \$675,000 for sharing thirty songs⁶⁵ (Depoorter et al. 2011; for bad more press on the UK's performance rights organization "PRS for Music" see Masnick 2009c,d,e). Not only did the bad press negatively affect the majors public image, it increased publicity for file sharing and educated users to better

⁶¹An example of success for the motion picture industry in the UK is the case against Anton Vickerman and his link site SurfTheChannel (Ars Technica 2012b). On August 14, 2012 Vickerman was sentenced to four years in prison, see Newcastle upon Tyne Crown Court, August 14, 2012, R v. Anton Vickerman, Indictment No. T2009 7188 (http://www.judiciary.gov.uk/Resources/JCO/Documents/Judgments/anton-vickerman-sentencingremarks-14082012.pdf). On the involvement of the movie studio trade group Federation Against Copyright Theft (FACT) see also Masnick (2009h).

⁶²See http://en.wikipedia.org/wiki/Comparison of file_hosting_services, April 18, 2013.

⁶³"RIAA watch" tracked this number, see http://sharenomore.blogspot.com/, Dec 17, 2012.

 $^{^{64}}$ Capitol Records, Inc. v. Thomas-Rasset No. 06-CV-01497 (MJD/LIB), 2009 WL 2030495 (D. Minn. June 18, 2009).

⁶⁵Sony BMG Music Entertainment v. Tenenbaum, No. 07cv11446-NG, 2009 U.S. Dist. LEXIS 115734 (D. Mass. Dec. 7, 2009).

hide their activity (Groennings 2005, Johnson et al. 2009).⁶⁶

Aiming to deter and stigmatize file sharers through material (fees and penalties) and immaterial (shaming) sanctions, the industry follows a traditional approach also in economic theory. Economic cost benefit analysis suggests, that material sanctions repel certain behavior when expected sanctions exceed expected benefits.⁶⁷ The problem here is the relatively small probability to get caught because of the technological progress. This significantly lowers the expected cost. To correct for this, the industry consequently, elevates the penalties.

Although deterrence is theoretically effective when expected costs exceed expected benefits, individuals do not behave rationally here. For example, in experimental settings holding expected sanctions constant, Depoorter et al. (2011) find that higher penalties deter file sharing more effectively than a higher probability of getting caught.⁶⁸ Ultimately, the majors found themselves in a serious dilemma: to achieve effective deterrence, they went for tough penalties against a huge number of poorly organized and dispersed private individuals (Opderbeck 2005). But those high sanctions exceed a socially acceptable level. They are regarded as out of proportion since they are hardly in any relation to the potential damage caused and clearly exceed the financial possibilities of the defendants (Depoorter et al. 2011). In another case, even the judge called the RIAA's high claims in damages against the file sharing software LimeWire "absurd." Although the RIAA neglects to ever have named a definite number, the media reports that the claims would have summed up to \$72 trillion, this amount exceeds the world's GDP in one year (Forbes 2012).

Moreover, while monitoring of P2P file sharing over a public BitTorrent tracker is relatively easy since everybody can access the torrent and thus the swarm (all peers upor downloading the torrent simultaneously) (Chothia et al. 2013), it is more difficult for private trackers or cyberlockers. But since DRM proved impracticable, the industry has to closely monitor online behavior in order to prove their illegal activity. The ultimate consequence would be deep packet inspection (DPI). Internet traffic is separated into single packets. DPI allows to closer identify what kind of content a user up- or downloads. However, this triggers a huge debate about net neutrality that cannot be covered here. DPI allows for discrimination of users and content. Moreover, it would remain an open

 $^{^{66}}$ Masnick (2003, 2005) coined this the "Streisand effect." In her effort to hide her luxurious Malibu mansion from the public, US actress Barbara Streisand involuntarily drew more attention on it.

⁶⁷The result is a negative net utility, see Posner (1998) for a general economic analysis of law or with special regards to crime see Becker (1968), Posner (1985).

⁶⁸ Although the authors regard file sharing in general and focus not only on music, the logic is still directly applicable to only music.

question "how deep" DPI might inspect content online. The Internet's attractiveness depends on confidentiality of communication and exchange of data. Critics are concerned that DPI would ultimately threaten the Internet's integrity (for a thorough analysis, see Abelson et al. 2009).

In 2008, potentially as a result of the bad press and public pressure, the RIAA announced to stop their law suits. Whereas individual lawsuits continue in many countries, the RIAA now collaborates with Internet Service Providers (ISPs). In order to do so the Center for Copyright Information was established in mid 2011 (The Wall Street Journal 2008, Bridy 2012). This Cooperation with Internet Service Providers usually proceeds in a so-called graduated response. Identified infringers will be notified several times (conventionally through three to six "strikes") before intermediate technical measures are implemented such as bandwidth reduction, protocol blocking, and ultimately account suspension. These warnings will also inform the Internet users about the illegality of their activity and, e.g., securing their Internet connection.

Europe implemented graduated response before the US. Starting in 2009 in France $(HADOPI \ law)^{69}$ and in 2010 in the UK (Digital Economy Act 2010), the approach spread around the globe, now also applied in New Zealand and South Korea (BBC 2012a, New York Times 2012). Influential technology news and information website Ars Technica (2008a) summarizes the advantages as follows:

"For the music business, it largely eliminates the need to file lawsuits against end users, and it replaces often massive copyright damages with warnings and then ISP sanctions. For end users, it provides multiple chances to stop infringing without threat of lawsuits. For ISPs, the plan allows them to preserve user privacy (they don't generally turn any information back over to the content owners), doesn't involve any filtering, and keeps the ISPs free from government mandates to police their networks" (see also Ars Technica 2008c).

Similar to earlier approaches to file sharing, it is difficult to exactly quantify the effect of the graduated response. The HADOPI law foresees a maximum sentence of $\leq 1,500$ (\$1,950) and temporary Internet disconnection. Yet, only one Frenchman, 40 year old Alain Prevost, was fined ≤ 150 (\$195) for downloading Rhianna songs – even though his now divorced wife admitted to have downloaded the files (BBC 2012b, techdirt 2012). Marie-Francoise Marais, head of HADOPI, openly states that the agency follows an educational, not a repressive mission (Le Pays 2012). According to a mid 2012 press

 $^{^{69}\,{\}rm For}\,$ details on the procedure see http://www.hadopi.fr/usages-responsables/nouvelles-libertes-nouvelles-responsabilites/reponse-graduee, May 8, 2013.

release, the agency sent out 3m first strikes, 1.25m second strikes, 100,000 third strikes. Only 14 cases were handed to the courts. The HADOPI (2012) agency describes this result as a success, backed by the RIAA (2012).⁷⁰ Remarkably, Danaher et al. (2012) diagnose a 22.5% to 25% increase in French iTunes sales, especially in genres mostly subject to file sharing, which they link to higher consumer awareness because of HADOPI (see also New York Times 2012).⁷¹

More recently, France has taken steps towards another reform regarding file sharing. Potentially, the HADOPI agency will be dissolved and all competences transferred to the Conseil supérieur de l'audiovisuel (CSA). In September 2012, the French Ministére de la Culture et de la Communication launched the "Culture-Acte 2" commission. Under the head of Pierre Lescure, former CEO of premium pay television channel Canal Plus, the "commission has been tasked with considering efficient ways to fight illegal practices in tandem with European partners, finding a balanced way of raising funds to avoid a gradual concentration of value into the end of the chain, where the most powerful players benefit, to consider consumer expectations and to offer access to the greatest number" (telecompaper 2012). After numerous auditions with stakeholders, the commission reported back in May 2013 with 80 propositions to bring media into the digital age, proposing among other things to reduce fines from €1,500 (\$1,950) to €60 (\$78) and to abandon Internet disconnections (Ministère de la Culture et de la Communication 2013a,b, Lescure 2013a,b, Masnick 2013a).

Still, these new approaches also incur privacy issues. To lower costs, the majors consequently lobby for automated systems to identify and sue infringers in their graduated response. This shift away from direct infringement "imposes substantial social costs on both legitimate users and on innovation, costs that the copyright owners do not have to bear" (Lemley and Reese 2004: 1434). Internet activists fear private censorship (La Quadrature du Net 2013). In consequence, public support for the war on file sharing has been eroding further. Public support for the war on file sharing depends on the public perception. On whether the public will regard file sharing as illegitimate theft from the artists or as a means to legitimately fight old hierarchical structures and hurt a sinking ship that will not give space to overdue progress as long as it exists. Instead of

⁷⁰ See also the video-interview on http://vimeo.com/48941496, May 13, 2013.

⁷¹ Of course, causality is difficult here. iTunes might have improved at the same time in France. Moreover, subscriptions for Kim Schmitz's new cyberlocker MEGA also went up during the same time (techdirt 2013), and even though digital sales rose, overall music sales continued to fall (Masnick 2012a). Not to mention that the French tax payer paid $\in 12m$ (\$15.6m) for the HADOPI agency, techdirt (2012: no page) highlights "that HADOPI's first victim has now said that he intends to cancel his Internet subscription completely [...]. It's hard to see how this kind of result is going to help the growth of digital music in France."

deterring, inadequately high sanctions trigger backlash, a perverse public reaction: file sharing not only persists and has become an everyday activity especially for teenagers, higher sanctions might even provoke more file sharing rather than deter it.

In any case, tech-savvy file sharers will always find ways to eschew monitoring. The tougher the activities against file sharing, the more this will raise public awareness and incentivize and educate file sharers to professionalize and better hide their their activity (Johnson et al. 2009, New York Times 2012).

To sum up, the war on file sharing seems to be devastating for the majors. To be sure, the efforts of the industry against file sharing have materialized in legal code and payments to the industry; the first file sharing platform Napster had to close as well as Grokster, Kazaa, and many other platforms and websites (for a comprehensive overview see Depoorter et al. 2011: Part II); and the industry has made progress in understanding that hardly any – at least tech-savvy – customer is willing to pay for music content that is in almost any regard inferior to the quasi-free illegal substitute (Biddle et al. 2002). But while the war on file sharing appears successful from the outside, a closer look shows that it fails to deter file sharing and might even have perverse effects. For every take down, several new sites emerge practically instantly. It might be possible that the industry will be able to sue peers active in private trackers or on cyberlockers more effectively in the future. However, since file sharing is ignorant to national borders, file sharers or cyberlockers can always hide in remote jurisdictions. The administrative effort would be enormous – in any way much more expensive than establishing legal alternatives to file sharing. As long as the use of legal digital content remains uncomfortably far behind the possibilities users enjoyed with the conventional physical carriers, users might as well opt for the illegal alternative (Masnick 2009f, 2011a,b).

This leads to one big question: why does the industry most effortfully fight a war against a not even causally proven enemy, that cannot be won technically, effectively educates file sharers to better hide their activity, results in bad press and more popularity for file sharing, risks to provoke rather than deter file sharers, and does not forward the goal of protecting music production? As the next section will show, the answer lies in the new structures of the music market, in which today's powerful players play a little if any role.

1.6 The Real Goal of the Majors

1.6.1 Defending Mainstream Marketing

The majors are reasonably suspicious about integrating users into music marketing regarding communication, feedback, and recommendation mechanisms, as this would also mean to give away control over their quasi-monopoly on music marketing. This allowed the majors to place their content in a favorable position. While the majors' predominant position in producing and distributing music already fell prey to technological change, their marketing power would follow suit. Even though the RIAA now propagates that "the *single* most important anti-piracy strategy remains innovation, experimentation and working with our technology partners to offer fans an array of legal music experiences" (own emphasis, RIAA 2012), the majors – unsurprisingly – have no interest in losing their advantageous economic position. Nevertheless, integrating user recommendations into music markets is *inevitable* to come out on top of file sharing.

Yet, the overall music industry will most likely benefit in the new model.⁷² The barrier of entry for new artists is significantly lowered and awareness about their music will depend on the music quality, respectively on which and how many users of the new models will recommend the music (which, in a decentral evaluation and selection process, will correlate with quality in the end). Especially now well-established musicians, who earn a major share of their income through copyrighted material, might eventually be worse off. Their fame earns high concert ticket prices and emerging new artists will cannibalize these prices when consumers shift their buying behavior. The new model serves as a discovery and promotional platform, paving the way for newer, smaller artists to cash in on concerts, merchandise, sponsoring, and the sale of special editions of physical music carriers. This finally allows for more artists to enter the market and to financially benefit from their product (Helberger et al. 2012). Step by step, the age of superstars might come to an end.

As long as recommendation systems are not fully implemented the majors continue to place their content in new streaming services like Spotify or Deezer. Given the importance of mainstream content, they have an advantageous bargaining position. In this environment, the one remaining threat lies in file sharing platforms and communities. Major label content is – at this moment – indispensable for the new models. As long as most consumers listen to mainstream music, no provider could mobilize a critical mass of consumers with just independent content. For example, the website MP3.com,

 $^{^{72}}$ Some argue that this has been the reality all along, as, e.g., Page and Carey (2009) conclude. See on this also Masnick (2009g).

co-founded in November 1997 by Michael Robertson and Greg Flores, focuses on independent artists. Even though the site is still online, it is by far less popular than today's popular platforms iTunes, Rhapsody, Spotify, or Deezer.

Since mainstream content is so important, majors will always find means to place their content before all other content. Their influence goes so far, some argue, that the big labels were even able to "buy themselves" into Spotify in exchange for access to their music (Arrington 2009, techdirt 2009). Consequentially, current recommendation systems do only serve the majors, not the consumer. The majors have no interest in serving music to interested customers, they want to maximize profits – of *their* material. Despite the "insight" of the RIAA (2012) into the necessity to innovate, Lamere (2009) exemplifies the defectiveness of current music recommendation. Referring to Amazon.com, the world's largest online retailer, Brian Whitman⁷³ boils the corruptness of current recommendation models to an essence:

"Amazon is not optimizing for the noble work of raising independent artists' profiles to the public, and they're definitely not optimizing for a good musical experience. They're statistically optimizing to *make more money*, to sell you more things. Luckily this is the fruit fly of music recommendation, the late night infomercial quality of a music discovery experience that also might dry your lettuce if you spin it fast enough. And I doubt Amazon would ever claim otherwise" (variogr.am 2012).

Economists might intuitively object that individuals only purchase according to their preferences. This ex-post logic is obviously flawed in today's music market which is subject to attention economics. Rather, individuals make a buying decision within the range of what they are exposed to. They simply cannot buy commodities they are unaware of. The above quotation has to be understood in this light.

The main issue here is that as long as the industry dominates the awareness about music in recommendation models, these models cannot fully benefit from the social media component and stay behind file sharing. While fighting the file sharing communities, the majors can even gain insightful information on what is "trending" from observing network traffic (for some rare information see WIRED 2003, GazetteLive 2010, and also WIRED 2009b).

⁷³Brian Whitman is the co-founder of The Echo Nest, see footnote 6.

1.6.2 Effective Deterrence of Marginal Infringers

Targeting the marginal infringer, who can most easily be deterred, the war on file sharing successfully separates the legal mainstream from illegal underground consumers.

First, it complicates file sharing, shifting it into a tech-savvy underground. While it is true that the harsh sanctions educate some file sharers to better hide their activity, it also raises the barrier for consumers to actually make the decision to engage in file sharing. All efforts to hide file sharing activity on the Internet require some technical understanding and sophistication. Starting from search costs (where to search) or identifying potentially harmful content like viruses (Johnson et al. 2009). Cyberlockers have to give in regarding copyrights violations. Infringing content is increasingly deleted on request of rights holders resulting in many dead links (The Awl 2012). Private trackers, apparently afraid of informers who could enter their community, toughen their ratio requirements and are increasingly strict and cautious giving away new invites (see Torrent Invites 2012). This renders illegal file sharing more uncomfortable and legal substitutes more attractive.

Second, the industry strengthens existing "expressive law" that individuals might internalize (Cooter 1998, 2000b,a, McAdams 2000). The idea is to create a legal "focal point by expressing values that might tip norms to a new equilibrium, this process may create a social norm or internalize a normative value" (Depoorter et al. 2011: 1271). The expressive law dimension is a clear goal of both the UK's Digital Economy Act (Mansell and Steinmueller 2013: 13) as well as the French HADOPI. The industry has a strong intuitive point arguing that artists legitimately claim payment for their music. Building on moral ground for their war in defending the artists, the industry sets a legal focal point that again helps to convince marginal infringers to remain in legal spheres (Cooter 1998, McAdams 2000). The wider, less technology oriented public, might not question this causality even though "poor" unknown artists are most disadvantaged by current models dominated by mainstream marketing.

The decision for a graduated response allows to educate potentially ignorant Internet users about what is illegal. This achieves more effective deterrence as file sharers are clearly informed about the illegality of their actions, that they have to expect sanctions, and probably most importantly that they *can* be detected. The probability to get caught is a key element of effective deterrence, which economically is a product of expected sanctions and this probability (Becker 1968, Posner 1985). To be sure, file sharing continues to exist but note, that the graduated response shows results at significantly reducing the bad press in comparison to the former approach.

Moreover, lowering the number of peers in a file sharing community will eventually

corrupt the network. Either because no new content is injected in the case of, e.g. file hosting services. Or because the networks which depend on a constant upload from their users (based on BitTorrent technology) become unidirectional providers when users are afraid of lawsuits for uploading content, they only download (leech) and the whole system slows down until it becomes unattractive.

That said, the majors have been remarkably successful defending their interest and dominant position in the market. Much more than deterring users from an illegal activity, it deters users from systems allowing them to discover and consume music outside the the players' marketing reach (see also The Awl 2012). New models of music distribution could have proven these "dinosaurs" (Lessig 2005) obsolete more than a decade ago. This calls for a reflection on implications for the law.

1.7 Implications for International Law

1.7.1 The Welfare Perspective

The official reasoning of the majors behind the war on file sharing is to protect music production as such. Given the value of music for society, the legislator should follow this as a first goal. Cultivating an environment for superstars, the majors kept music output flowing for decades. However, they also filtered music output. This gatekeeping might have been necessary to pool the resources required in the high fixed cost environment of former music production. This is no longer the case as technological change significantly changed cost structures in the market. Ku (2002) goes so far to argue that due to technological change, copyright can be abandoned completely and technology permits to compensate artists (although it cannot yet be said if and to what extent). Bambauer (2008: 346) takes the same line arguing that "that since [copyright] prevents production of attractive, diverse, cheaper new expression, and blocks the promise of re-mix culture, it should be eliminated."⁷⁴ Furthermore, anecdotal evidence seems to point into the direction that artists follow intrinsic rather than monetary motivation (Oberholzer-Gee and Strumpf 2010). The artist has always been the source of music creation. This shifts the artist in the main focus of future legislation. In the current model, only few artists have exclusive rights to their musical creation. That said, a shift of focus is key for further innovation of new models in the music industry as a whole: protecting the artist more than the right holder. Sufficient compensation for artists will be crucial for their motivation and possibility to produce. Thus, legislation should ask what best serves the

⁷⁴ More generally, Benkler (1999, 2004, 2006) explored the potential of managing resources in networked environments, coining the term "commons-based peer production."

interests of musicians rather than their agents. New models of music distribution promise to provide at least some income to the artist.⁷⁵

As a second goal, the legislator should design the legal framework in a way that permits a diverse music production. Here, an economic welfare perspective clearly recommends to break up the current power structure. The majors filter musicians, leaving the music market more homogeneous. Breaking the oligopoly lowers entry barriers for new artists. More participating artists increase competition in the market. Besides from lowering prices for the consumer, the market becomes more diverse. Recommendation systems make niche music accessible to new demand. Since music is a cultural good, a diverse music supply has an inherent value to society. Of course, stiffer competition can also increase financial pressure on musicians. The issue of adequate compensation for the artists is crucial and requires further research. But since technological progress cannot be stopped, music enthusiasts will continue to share files as long as no attractive legal alternative serves their demand.

Even though new models will attack big player marketing, this does not in any case mean that the majors will disappear completely. It is possible that the market will pluralize such that majors still serve a downscaled mainstream market for less involved consumers whereas independents serve niches music enthusiasts who enjoy a more direct communication with artists (May 2007). Nonetheless, the majors have considerable lobbying power which they will utilize to secure their profitability, prevalence, and influence (Romer 2002, Lessig 2005: 218).⁷⁶ The war on file sharing will continue to polarize the public as recent worldwide protests against the multinational treaty Anti-Counterfeiting Trade Agreement (ACTA) showed (see, e.g., WIRED 2012b). Indeed, the legal decision about how tightly the Internet may be monitored to identify copyright violations will affect online privacy and ultimately the Internet as such. Philip Zimmerman's insight that "if privacy is outlawed, only outlaws will have privacy" (Zimmermann 1994) is thought-provoking.

⁷⁵ It should be noted that technology permits to perfectly monitor listening behavior. Thus, the share of the user subscription fees which is reserved for the artists can be distributed exactly according to user listening behavior. Repeated listening to the same song can be inflated to the advantage of artists who are less popular.

⁷⁶Evidence for lobbying is scarce. However, given the strong monetary incentives for the majors to preserve and extend their business model, there is no doubt that lobbying exists. Some argue that this showed when the EU decided to to harmonize and extend copyright related rights from 50 to 70 years after the year of publication (directive 93/98/EEC now replaced by directive 2006/116/EC). The official argument was to benefit artists and their bereaved people for two generations. However, experts voiced concerns that only few people gained from this whereas major labels, in most cases the rights holders, expect huge benefits (see, e.g., Littoz-Monnet 2007: 131, or in German language http://irights.info/leistungschutzrechte-an-tonaufnahmen-der-vergessene-skandal/10715, May 8, 2013).

Consequentially, aiming to maximize welfare, new legislation has to pave the way for new business models against the lobbying power of the majors. Since file sharing is a global problem, national solutions have to fall short of the mark. This raises the problem that the need for and efficiency of economies of scale shifts from the majors to new streaming services. These have already entered into international cut-throat competition and it is not only foreseeable but makes economic sense that a new oligopoly might fill this position. This might require oligopoly regulation on an international level.

1.7.2 Regulating the New Gatekeepers?

National collecting societies and performance rights organizations will have to transparently distribute royalties to artists according to the play counts of the new models. In fact, transparency, especially at the licensing and reporting level (Page 2008), is of highest importance for the functioning but also for the legitimacy of new models.⁷⁷

A central weak point would be to make the monitoring objective while respecting user privacy. It is beyond debate that those agents with enough economic power will do anything to manipulate and corrupt any system to raise exposure of their content. A though-provoking example is how UMG placed its content in the clip rotation of German music television channel VIVA in 2002 and 2003. UMG bought the guarantee to place up to 50 music videos on VIVA, paying up to \in 18,000 per clip or almost \in 1m in total,⁷⁸ plus a profit-sharing on sold units (SPIEGEL ONLINE 2003). Although the majors deny it, they have been repeatedly accused of charts manipulation (Sydney Morning Herald 2008, SPIEGEL ONLINE 2008, 2010, allkpop 2012). Moreover, monitoring agencies might forward own interests against other parties. This will ultimately require oligopoly or even monopoly regulation on the international level.

However, the need for regulation – although it shall not be neglected – might not be as high as it seems at first glance. New approaches have to abstain from the customary sticks (lawsuits, sanctions) in favor of carrots in the form of offering attractive music libraries with helpful and objective user-generated recommendation-systems. Furthermore, music

⁷⁷ For example, the Electronic Frontier Foundation recommends voluntary collective licensing while file sharing continues in the current way. The licensing money "gets divided among rights-holders based on the popularity of their music" (Electronic Frontier Foundation 2008: 1), while popularity is anonymously monitored by independent companies. Notably, Marine Le Pen of the French party National Front favors a similar approach rather than Nicolas Sarkozy's HADOPI law (New York Times 2012). Especially in Germany, concept of a culture flatrate (Kulturflatrate) is increasingly debated (Rossnagel et al. 2010). Mandatory fees seem more likely since the administrative effort would be tremendous linking voluntary payments to "legit" file sharers. However, to better separate legal from illegal use, national price discrimination for legal models can better address this issue. Competition between music service providers can result in constant improvements.

⁷⁸ From mid 2002 to mid 2003 the US Dollar and the Euro were more or less at parity.

consumption might not be the most sensible area of individual privacy – instead, many music enthusiasts see it the opposite way and are happy to share their listening preferences with peers or even the public. Each monitoring trades off some anonymity but only complete monitoring allows for a fair distribution of money to the artists and it can guarantee the best recommendation system. Central monitoring of listening behavior facilitates to identify and filter out attempts to corrupt the system. Since long-term business models rely on the authenticity of recommendations, the provider has a strong incentive to filter out fakes. As there will ultimately not be many providers, the providers might control themselves. Finally, providers have to concentrate on a good product for a good price that is superior to illegal or other challenging offers.⁷⁹

It is important in any case to disseminate new models rapidly. Otherwise illegal infrastructure might improve even further whereas new models can re-establish the perception in the young generation that it is worth to pay for music. The licensing constraints in Germany by the collecting society GEMA for the streaming services YouTube or Pandora hinder the fast emergence of new models (see Billboard 2011, New York Times 2009).

1.8 Conclusion

For decades, the major labels (majors) have been structurally dominating the music market in music production and distribution. Technological change fundamentally lowered the costs for both and new patterns of consumption emerged for digitized music. Instead of addressing this fundamental change with appropriate innovations, the majors have been holding on to their conventional business models. Since the 2000s they complain about falling revenue. Blaming the losses on online music piracy, the majors declared war on file sharing. This article showed that the war cannot be won technically. Rather, it perversely triggers more popularity for file sharing, leads to bad press, educates file sharers to better hide their activity and might even lead to more file sharing.

Yet, this heuristic analysis of the structural technological change reveals that profitable future music distribution requires radically new business models. Streaming services offer superior usability than current file sharing infrastructure as they can offer instant access to a complete and perfectly organized music library. But the key element lies in music discovery. New models have to implement reliable discovery mechanisms for new music according to the audiophile consumer's taste. In the long term, only objective consumer

⁷⁹Other providers of online services provide an example here. Some criticize Google's privacy approach, stating for example that "the collection of personal information online is an invasion of privacy" (Ars Technica 2012c). Yet, it apparently offers such a good service that it remains the second most consulted web site in the world (see Alexa.com http://www.alexa.com/topsites, May 30, 2012).

recommendations can guarantee such music discovery which is one of the reasons why music fans turned towards underground file sharing in the first place.

Yet, the majors' marketing machinery enables them to affect consumer taste and guarantees their profitability. New recommendation systems leave no control about what consumers decide to recommend. Thus, such systems cannibalize the conventional market domination of the majors. Only recently an increasing number of international music streaming services emerged but as long as only mainstream music can attract the still homogenized demand, the majors can place their content and extend their marketing machine by exactly these new models. Blocking or manipulating these new business models is thus central for the majors to maintain their market power and profitability. The war on file sharing diverts public attention from the creative innovative potential to the potential destructive effects of technological change (Bishop 2004). The war thus aims to preserve the majors' power over content and is not a war to protect musicians or music production as such. However, as long as new models of music distribution do not integrate objective user-based recommendation, they stay behind file sharing communities.

The losers of the technological change and the new models are well-established agents, be it the major labels and their sub-labels, related organizations, or superstar artists. But by blocking innovative recommendation systems and lobbying for their war on file sharing, the majors not only hinder smaller artists and labels to enter the market and make it more heterogeneous. Lobbying for tighter online monitoring, they also threaten the integrity of the Internet as a whole. Winners of new models are not only consumers who benefit from a greater, more diverse selection at their hands, lower prices, and a freer choice due to less powerful marketing. Probably even more important, new artists face lower barriers of entry, can connect with fans more easily and get more exposure through social media (Helberger et al. 2012). However they also face more competition as this holds for all artists. A more democratic structure replacing the traditional marketing influence of the majors also requires a more complex buying decision from the consumer, who can no longer rely on the dominant marketing of only three big labels. Anderson encapsulates the end of mass taste through marketing:

"For too long we've been suffering the tyranny of lowest-common-denominator fare, subjected to brain-dead summer blockbusters and manufactured pop. Why? Economics. Many of our assumptions about popular taste are actually artifacts of poor supply-and-demand matching — a market response to inefficient distribution" Anderson (2006: 16, see also 38-40).

Music has throughout all times been a product that people were happy to pay for and

support. Technology revolutionized the direct way of music experience by banning it on a marketable physical carrier. Subsequently, some musicians might have focused more on sales numbers than on their fanbase or music itself. In light of the cultural quality of music, once the concept of community erodes so does support for musicians (Mcleod 2005). Now, in a next step, technological change allows for a quasi costless distribution of music which carries significant marketing potential. New agents, especially musicians, are able to enter the market and challenge the incumbent majors. Amanda Palmer might serve as a future-oriented example. In her TED-talk, the American performer and musician describes her decision to give her music away for free. Gaining popularity with her musical projects, Palmer signed with a major label. When her record sold only 25,000 copies, the label declared this a fail. She quit her contract and instead decided to ask her fans for money. Via the crowd funding platform "kickstarter" she asked for \$100,000. She received \$1.2m.⁸⁰ At the end of her talk, Palmer draws the following conclusion. While in the past, the question in the music business was: "How do we make people pay for music?", her approach is: "How do we let people pay for music?" (Palmer 2013). Innovative models of music distribution can lead the way for this.

⁸⁰See her kickstarter site on http://www.kickstarter.com/projects/amandapalmer/amanda-palmer-thenew-record-art-book-and-tour, April 29, 2013. Another stunning example, even though not for music, is the British artist team Monty Python. After providing their material for free on their YouTube channel and "in return" asking their fans to click their links and buy their movies and shows, "Monty Python's DVDs had climbed to No. 2 on Amazon's Movies and TV best-sellers list, with increased sales of 23,000 percent" (Anderson 2009: 2).

Appendix

	Title/Artist	Label	Sublabel(s)	Units Sold	
1	21 / Adele	SME	XL, Columbia	5256	
2	Red / Taylor Swift	UMG	Big Machine Records (UMG as distributor)	3892	
3	Up All Night / One Direction	SME	Syco, Columbia	2334	
4	Believe / Justin Bieber	UMG	Island Records	2142	
5	Some Nights / Fun.	WMG	Fueled by Ramen, Nettwerk, Paper + Plastick,	1923	
			Atlantic, Elektra		
6	Overexposed/~Maroon~5	UMG	A&M Octone Records	1896	
7	Pink FridayRoman Reloaded $/$	UMG	Cash Money, Young Money, Universal Motown,	1657	
	Nicki Minaj		Universal Republic, Republic		
8	Babel / Mumford & Sons	UMG	Gentlemen of the Road, Island (UK),	1605	
			Glassnote (US), Universal Music (Canada),		
			Universal Music Australia (AUS)		
9	Tailgates & Tanlines / Luke Bryan	EMI	Capitol Records Nashville	1600	
10	Take Me Home / One Direction	SME	Syco, Columbia	1565	
	Sum Units			23870	
	Total Album Sales 2012 Percentage of Top Ten Units on Total Units				

Table 1.2: 2012 Percentage of Top Ten Albums and Track Equivalent Albums (with Label) on Total Album Sales in Thousands (Nielsen Company & Billboard 2013)

	Title/Artist	Label	Sublabel(s)	Units Sold
1	Somebody That I Used To /	UMG	Fairfax, Universal Republic, Independent,	6801
	Gotye ft. Kimbra		Samples 'n' Seconds, Inertia,	
			Lucky Number, Eleven	
2	Call Me Maybe / Carly Rae Jepsen	UMG	MapleMusic, 604, School Boy, Interscope	6472
3	We Are Young / Fun. ft. Janelle Monae	WMG	Fueled by Ramen, Nettwerk,	5948
			Paper + Plastick, Atlantic, Elektra	
4	Payphone / Maroon 5 ft. Wiz Khalifa	UMG	A&M Octone Records	4757
5	Starships / Nicki Minaj	UMG	Cash Money, Young Money, Universal	3979
			Motown, Universal Republic, Republic	
6	What Makes You Beautiful / One Direction	SME	Syco, Columbia	3881
7	Some Nights / Fun.	WMG	Fueled by Ramen, Nettwerk,	3839
			Paper + Plastick, Atlantic, Elektra	
8	Stronger / Kelly Clarkson	SME	RCA, 19, S	3823
9	Gangnam Style / Psy	UMG	YG, Universal Republic, School Boy	3592
10	One More Night / Maroon 5	UMG	A&M Octone Records	3461
	Sum Units			46553
	Total Digital Tracks 2012		Current	603000
			Catalog	733000
			Sum	1336000
	Percentage of Top Ten Units on Total Units			3.485

Table 1.3: 2012 Percentage of Top Ten Digital Songs (with Label) on Total Digital Song Sales in Thousands (Nielsen Company & Billboard 2013)

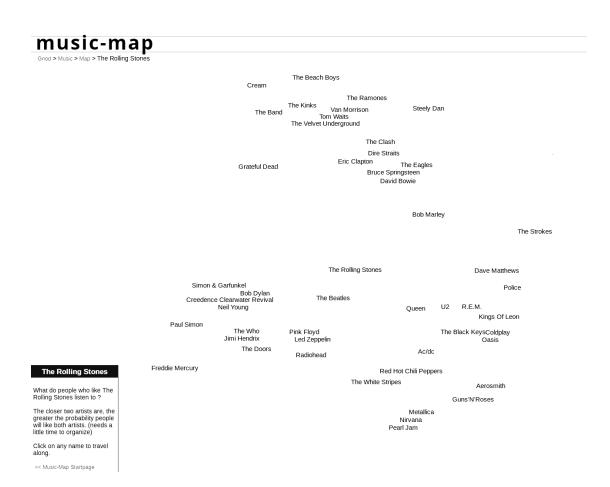


Figure 1.3: Gnod (global network of dreams) search for "The Rolling Stones" reveals a map of recommendations for similar music (colors are manipulated for better visibility; see http://www.music-map.com/the+rolling+stones.html, May 14, 2013).

Chapter 2

When Harsh Policies Backfire – Identity Economics and International Terrorism[†]

Abstract

How to best respond to international terrorism to prevent future attacks remains an open issue. Some evidence suggests that harsh means of deterrence, such as military intervention, are effective in this respect. Other pieces of evidence report of no such results, but rather point towards the opposite. We in this paper present a model-theoretical foundation for both views, analyze under which circumstances the trade-off emerges, and provide evidence for our conclusion. While we do not question the basic tendency of harsh policies to deter potential delinquents, we argue that the overall effect may not only prove such means ineffective, but can even provoke more terrorism. The reason, we argue, is based on aspects of people's identity. They may perceive harsh policies as illegitimate, thereby infringing their identities as self-determined people. Also, collateral damage may induce an "us-versusthem" attitude and thus foster oppositional identities. Further, according to our model, harsh policies will primarily be effective in deterring relatively "harmless" supporters of terrorism, which leads to an increasing radicalization of the remaining average perpetrator. We conclude that terrorism can most effectively be fought by using less visible means, such as intelligence. Further, the population of countries inhabited by terrorist groups has to be addressed as true partners in the war on terror, not as potential or de facto enemies. This includes knowledge of local norms and their respect.

Keywords International Terrorism, Identity Economics

JEL D03, K14, K42, P37

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When Harsh Policies Backfire – Identity Economics and International Terrorism

2.1 Introduction

How to best respond to international terrorism to prevent future attacks remains an open issue. Whether or not the so-called "War on Terror",¹ for instance, has been a success (in particular from the United States' point of view) probably depends on one's political perspective. On the one hand, terrorist attacks within the US borders similar to those of 9/11 have not been repeated and the personification of the main enemy in this "war", Osama Bin Laden, was killed. It is further argued that the death or capture of other important figures of Al-Qaeda has successfully decapitated the terrorist organization's central leadership and hurt the organization's image (see, e.g. Forbes 2011, Jones and Libicki 2008: 103f.). On the other hand, the number of terrorist attacks in countries most affected by the "War on Terror", i.e. Afghanistan and Iraq, has increased dramatically (see the appendix for an illustration of these data).

To avoid misunderstandings: The "War on Terror" certainly does not have a unique appearance. Several "doctrines" have taken turns, beginning with the so-called Bush-doctrine, followed by the Petraeus-doctrine and the Obama-doctrine. Each of these doctrines shares what might be labeled a specific attitude, or an emphasis on specific military means. Very simply stated, these changed from harsh military intervention, over nation-building to the increasing application of drones in the respective doctrines. What we take to be the essence of all these means is that they are all accompanied by international military operating in foreign countries to further national interests in the widest sense.² This essence is what we in the following will refer to when speaking of the "War on Terror."

Obviously, the above-mentioned data on terrorist attacks in Afghanistan and Iraq are not directly suitable for concluding that the "War on Terror" in fact caused more terrorist activity.³ It could, for instance, be argued that the increased presence of US troops in

¹To comment on the by all means controversial terminology, Jones and Libicki (2008: 105f.) remark: "U.S. policymakers and key national-security documents referred to operations against al Qa'ida as the global war on terror. The use of the word war to describe U.S. efforts had an important symbolic importance, since it suggested a military conflict that required a military solution."

²These interests need not be economic. Arresting heads of international terror organizations may well be the only interest a country follows abroad.

³A definition of the terms terror, terrorism, or terrorist is not straightforward. There is no general, international consensus on the definition of terrorism, neither in academia, nor in the law. One reason may be that governments might define any countermovement as illegitimate. Also bear in mind that the French term "terreur" originally described governmental violent repression against the revolutionaries in 1793 and 1794, most directly in the form of executions (Tilly 2004). We in the following stick to the definition of the United States Department of State (2004: XII) which defines terrorism as "politically motivated violence perpetrated against noncombatant targets by subnational groups or clandestine agents, usually intended to influence an audience" (see also Ruby 2002).

Afghanistan and Iraq gave potential terrorists a previously non-existent (or prohibitively costly) opportunity to attack them. Further, the data as such are often not reliable. The official data from the United States Department of State (2004: 176), for example, apparently suffer from severe measurement errors. While it states a continuous decline for terrorist attacks by Al-Qaeda or similar groups from 2001 onwards, others state that their number has significantly increased after 2003 (see Krueger 2007).⁴

Despite this, in our view, limited possibility to reliably assess the effects of the "War on Terror" directly by statistical means, some parts of the empirical literature appear to show evidence for a deterrent effect of "harsh interventions". Lyall (2009), for instance, found that indiscriminate bomb shelling by the Russian army in Chechnya appears to have been successful in fighting insurgencies. Shelled villages saw a significant reduction in insurgent attacks as compared to control villages.

But this finding cannot be generalized. Other parts of the empirical literature argue that harsh intervention may prove counterproductive in that it raises opposition. Malečková and Stanišić (2011), for instance, have shown that a robust positive relationship exists between the share of the population with an unfavorable opinion towards another country and simultaneously justifying suicide bombings, and terrorism originating in this country.⁵ Similar results are found by (Condra and Shapiro 2012).

One theoretical argument supporting the latter findings of increased opposition rests on parochialism, the tendency of humans to treat members of one's own group favorably (see Sambanis et al. (2012) for an elaboration of this argument). Anti-social behavior towards other groups can be part of parochialism, at least if these other groups are perceived as rivals or enemies. The proximate cause for parochial practices is social identity. That is, the identification of individuals with others they share a "bond" with.⁶ In this paper, we will hence provide a model-theoretical argument including both material aspects and such of identity. Our major finding is that harsh policies will not *necessarily* deter terrorists, but may instead provoke more international terrorism to evolve.⁷ Further, a second draw-back of harsh policies occurs. While some people may be deterred, they nevertheless increase their (internal) opposition towards the external force driving these

⁴Referring to these errors, Secretary of State Colin Powell stated on the political talk show "Meet the Press" (on June 13, 2004): "Very embarrassing. I'm not a happy camper over this. We were wrong" (Krueger 2007: 59).

⁵Imposing warfare on other countries also negatively affects these countries' socio-economic development, at least in the short to medium run. According to Freytag et al. (2011), such socio-economic variables also do matter for the evolution of terrorism.

⁶This bond need not be very strong. In numerous experiments it was sufficient to give subjects the same color code to induce social identification.

⁷With *international* terrorism we mean terrorist acts where the nationality of perpetrator and victim fall apart.

policies. This effect may preclude sustaining peace.

Our argument runs along the following sequence. Section 2.2 will present the concept of identity in greater detail. In a nutshell, we argue that counterterrorism does not only affect the targeted terrorists but, as an external effect, the identity of the population of those regions in which terrorists hide. "Collateral damage", for instance, is most likely perceived as illegitimate. Illegitimacy, in our terms, is reflected in a (partial) loss of identity, which may be restored by retaliation, or a seeking of "in-group friends" as support against "out-group foes." Hence, sympathy with terrorist groups, or active and/or passive support for them will grow, possibly leading counterterrorism to provoke perverse effects. In section 2.3, we formalize our argument. Section 2.4 will then present some evidence for the central claims made. Concluding remarks and policy implications are offered in section 2.5.

2.2 Identity in Economics

Identity has been recognized as a driving force for terrorism mainly by psychological research. Schwartz et al. (2009), for instance, discuss three identity dimensions which can motivate terrorist behavior: cultural identity, social identity, and personal identity.⁸

In our analysis, we refer to aspects of identity as introduced to economics in Akerlof and Kranton (2000, 2010). In this literature, identity is defined as "a person's sense of self" (Akerlof and Kranton 2000: 715). A person's sense of self depends on the extent an individual fulfills consciously or unconsciously chosen social categories:

"People's identity defines who they are – their social category. Their identities will influence their decisions, because different norms for behavior are associated with different social categories" (Akerlof and Kranton 2000: 13).

Social categories bundle a variety of characteristics ranging from objective ones such as income, age, or skin color, to less tangible ones such as the social norms attached to the category. Finally, behavior is directly affected by these norms. Soldiers, for example, have to be "tough" or "manly", and comradely with their brothers-in-arms.⁹

The categories relevant for people's identities are not always self-selected, as the example of the soldier would imply. Examples of non-selected identities are categories like

⁸Within these dimensions, the authors more precisely define 11 elements promoting terrorism. Among these elements, "only the perception of a threat to the ingroup [...] appears to be a necessary condition without which terrorism will not occur" (Schwartz et al. 2009: 545f.).

⁹A recruitment ad for the Indian army vividly underlined these prescriptions with the slogan: "Be a man among men."

gender or race. Further, identity is not only affected by one's own choices, but also by others' actions. An insult, for instance, may impugn a man's masculinity if left unanswered in some regions of the world. The way in which this "answer" ought to be made is also culturally, i.e. norm-dependent.¹⁰

Which categories turn to be relevant for one's identity is not entirely clear. But self-selection, such as occupational choices,¹¹ and exclusion by others according to this category appear to be the most prominent reasons.

The exclusion mechanism is crucial for the economics of identity. Akerlof and Kranton (2000: 739) even state that "dominant groups define themselves by the exclusion of others."¹² Individuals and groups who cannot access a dominant group might react by developing oppositional identities, which include prescribed behaviors opposing those of the dominant group (Akerlof and Kranton 2000: Section V). Terrorists, per definition, oppose the established society. Terrorist groups are outgroups. Thus, they cannot seek protection in the governmental structure of a nation state but have to hide from the main group. Wherever their hideout, they depend on the local population around them.¹³ Equally, however, counterterrorism depends highly on information from the local population about the terrorist groups to fight them effectively. It is thus crucial for both parties to pull the local population on their side (Cooter and Ulen 2011).

Counterterrorist means, we argue, often ignore to pay sufficient attention to the local population which is excluded or even under general suspicion.¹⁴ When counterterrorism requires invading or occupying large territories or whole countries, like in the Afghanistanor Iraq-War, the local population is certainly affected. Especially an invasion or occupa-

 $^{^{10}}$ Cultures in this sense can well be defined on a lower than national level. Nisbett and Cohen (1996), for instance, analyze differences in such reactions between the northern and southern states of the USA.

¹¹Note that the choice need not be made out of concerns for this specific category, and still affect one's identity accordingly. One may choose to become a soldier simply because of a lack of alternatives, and then begin to develop a concern for the prescriptions attached to the job. In fact, as Akerlof and Kranton (2010) describe, large parts of the army training are dedicated to "personal reengineering" (p.39), i.e. change in identity.

 $^{^{12}}$ In this regard, we should not forget to mention the *Theory of the Leisure Class* by Thorstein Veblen (1899). Veblen holds that especially wealthier people aim to stand out from others by what he coins "conspicuous consumption."

¹³This holds for any unlawful organization, see Levitt and Venkatesh (2000) or Cooter and Ulen (2011: chapter 12).

¹⁴Besides the exclusion of certain groups, legitimacy of means plays a crucial role in matters of identity (see on this also D'Amico and Block 2007). Analyzing legal and illegal political protest, Opp and Roehl (1990) for example find that increases in sanctions may have an encouraging effect on the political opposition, at least if these sanctions are regarded as illegitimate. Opp (1994: 103) argues that, besides the perceived illegitimacy of government action, the deterrent or encouraging effect of legal enforcement depends on the individual's embeddedness in his social group. The closer delinquents are socially bound together, *ceteris paribus*, the more likely it is that they will stand up against legislation they regard as illegitimate.

tion communicates that the invaded state, including the people, is considered dangerous in total and at the same time incapable of dealing with problems such as terrorism. It also communicates that the current government is not respected. Harsher counterterrorist means claim more collateral and spill over to the people in the environment of terrorist groups. Even though the local population might not sympathize with radical terrorists, the feeling of exclusion can drive the people to oppose the dominant group and perceive itself as an outgroup. This outgroup as a new social category becomes the source of identity. In such a case, however, people might likely sympathize with the terrorists, who are also a defined outgroup against the dominant group and with whom some norms or even categories might well be shared. Not only does this social support strengthen the spirit of the already active terrorists, the new social category for the local people might radicalize them in a way increase their "identity utility" by becoming active terrorist themselves.

This logic finds support from survey data provided by Liberman (2012) in that "ordinary people favor punishing badly behaved foreign actors to make them 'pay' for their crimes rather than purely to protect national security interests." Further, concerns regard the local people:

"The use of massive military power against terrorist groups also runs a significant risk of turning the population against the government. This terrorist strategy is often referred to as provocation: Terrorist groups seek to goad the target government into a military response that harms civilians within the terrorist organization's home territory. The aim is to convince the population that the military is so evil that the terrorists' radical goals are justified. Al Qa'ida figures, including Ayman al-Zawahiri, adopted the strategy in such countries as Egypt 'to force the Egyptian regime to become even more repressive, to make the people hate it' " (Jones and Libicki 2008: 108f.).

Even worse, such a provocation might not be limited to the local people but might spread to otherwise completely unaffected people. Again with special regard to Al-Qaeda, the impression might emerge that the real target of the military offensive is not a rather isolated radical group, but the whole Islamic religion: "Such images as the Abu Ghraib prisoners were sent around the globe via Internet, satellite television, and cell phone. The war in Iraq also created a perception that Islam was under threat. Many Muslims accepted al Qa'ida's argument that jihad was justified precisely because Islam was under attack by the United States. Consequently, fighting ground wars in the Muslim world appeared to inflame, not quell, Islamic terrorism" (Jones and Libicki 2008: 110). When Harsh Policies Backfire – Identity Economics and International Terrorism

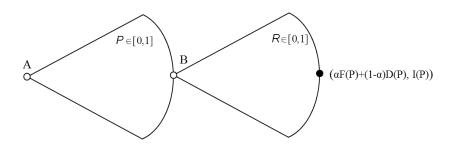


Figure 2.1: The Basic Game

Despite this evidence suggesting that military intervention may rather enflame opposition than alleviate it, terrorist attacks have to be prevented. Obviously, deterrence in the form of physical risks associated with terrorist activity may prove useful in this respect, and it has been shown that it can indeed be effective (Lyall (2009)). We therefore believe it helpful to formally analyze the working of both deterrence and identity in a coherent model. We in the following section offer such a model.

2.3 Modeling Identities

2.3.1 The Basic Game

Because we are not primarily concerned about the causes of an initial terrorist strike, but rather about the policies following it and the subsequent counter-reactions, we focus on a situation in which a terrorist attack has taken place.¹⁵ We will model this situation as a very simple two-stage sequential setting of complete information, and consider two countries. The basic structure is depicted in figure 2.1.

One of these countries, call it B, is the homeland of existing and potential terrorists. After being hit by an attack, country A decided on a policy to fight terrorism. The means it may use in this fight vary in "policy harshness", which we capture with the variable $P \in [0, 1]$. I.e., A may use rather harsh means such as military intervention, for which $P \to 1$, or rather docile means such as support of the local police to find the perpetrators and put them to court. We define the case of non-intervention as the policy with the lowest possible harshness, to which we assign the value P = 0.

As argued above, the means used by country A affect the identities of the inhabitants of country B. Inhabitants of country B may respond by showing a reaction $R \in [0, 1]$,

¹⁵Of course the reasons for the evolution of terrorism are intimately linked to the factors motivating counter-reaction. We here simply want to focus on the latter.

which we will derive in detail below. Let it suffice at this point to state that the larger R, the more "severe" the response will be.

The payoffs of country A depicted in figure 2.1 consist of two components, domestic affairs, represented by D(P), and foreign affairs F(P). We assume that payoffs from foreign affairs will be determined by the success of the fight against terrorism, measured by the overall reactions in country B (i.e. R) and the costs of the intervention, K(P), which are increasing in P. Crudely normalizing both the value of peace and the costs of intervention to unity, we may formally represent the payoffs from foreign affairs as

$$F(P) = (1 - R) - K(P).$$
(2.1)

Domestic and foreign affairs are weighted with $(1 - \alpha)$ and α , respectively, where we assume that $\alpha \in [0, 1]$. Both payoffs from domestic and foreign affairs are a function of the harshness parameter P. Our intuition is that using more resources abroad, for instance due to an increase in military expenditures abroad to increase the "pressure" on terrorists, will affect the available resources at home. But successful intervention may also reduce the number of terrorist attacks country A potentially suffers in future. The weight α depicts the relative role that domestic policies play in country A. Country B's payoff consists of the identity related issues, depicted as I(P), which we will turn to in more detail in the following subsection.¹⁶

2.3.2 Identity Utility

Identity may be affected both by terrorist attacks and by the means of foreign intervention following an attack. Citizens of a country being hit by a terrorist attack may suffer a loss in identity because, for instance, terrorists "proved" that the country and hence its citizens are incapable of defending themselves (otherwise the attack could not have been carried out successfully), or that they face serious opposition outside their borders, or simply because they perceive the attack as an offense. If citizens suffer a loss in identity, they may choose a reaction which re-establishes their identity.¹⁷ According to e.g. Akerlof and Kranton (2010), an aggressive response against members of an offending group sharing

 $^{^{16}}$ This is obviously not to say that other issues do not play a role for country *B*. But since we are mainly concerned with identity issues, we take the freedom to strip down payoffs to this single component.

¹⁷ One could likewise argue (in line with the standard rational choice framework) that citizens of the hit country may form beliefs about others which may justify a hard intervention abroad to prevent similar attacks.

a common identity may be adequate in this manner.¹⁸ Note also that a common enemy or threat binds together individuals who are otherwise only loosely connected.

Because our analysis focuses on the reaction to terrorist activities, we do not intend to investigate this issue further. We simply state that a reaction to terrorist attacks appear to be rationalisable. The resulting counterterrorist policies may have an impact on the identities of the people affected by them. Military intervention, for instance, may be perceived as an offense because it is illegitimate. Or, even if foreign forces are allowed to enter a country by its own government, they may be perceived as "offenders" if they violate locally prevailing norms while doing their job.¹⁹ This could range from violent entering of private homes, forcing women to unveil, or merely having female soldiers drive vehicles.²⁰ In this analysis we do not intend to go into details on when means are perceived as legitimate or not. For the sake of our argument, we assume that an increase in harshness is associated with an increase the number of norms held in the affected country being violated, and thus contributes to a perception of illegitimacy on the side of the affected people.

In case the response is perceived as illegitimate or illegitimately harsh, as for instance in case of an occupation, the identities of the inhabitants of the country intervened are affected negatively. We formally represent the expected utilities of the affected country's citizens as follows, and discuss its components subsequently:

$$u_i = -\eta(P)\theta_i + \eta(P)\rho(r_i)\theta_i - c(P, r_i).$$

$$(2.2)$$

We capture the initial negative impact of illegitimately harsh means on identity by a term $\eta(P)$, where, as introduced above, the larger P, the harsher the means of intervention will be and the larger the negative impact on the occupied people's identity. Because the importance of "identity" may differ between individuals, we weight this factor with an individual parameter θ_i . For the complete society we assume θ to be distributed according to some function $f(\theta)$ along the interval [0, 1], where low types place relatively

¹⁸Of course other, less aggressive responses can occur as well, depending on the norms prevalent in the society. See, e.g., Nisbett and Cohen (1996) for an analysis of cultural diversity on responses to offenses within the US.

¹⁹Note that occupation may take place also indirectly. Indirect occupation means that a country's government is forced to take certain actions by another government (Pape and Feldman 2010).

 $^{^{20}}$ A theoretical basis for such responses can be found in Norm Violation Theory, as introduced by DeRidder and Tripathi (1992). It studies how norm violations by members of one group affect the attributions of members of the other group. Accordingly, four factors influence the explanation/attribution of norm violation the victim group arrives at and its reaction: ingroup identification, intergroup attitudes, power, and fraternal relative deprivation.

little value on identity-related issues and high types a high value. We consider the case of P = 0 basically as non-intervention, for which $\eta(P = 0) = 0$. In response to intervention, the people of the affected country may choose to show individual reactions $r_i \in [0, 1]$, which may vary in intensity.

Showing a reaction may restore an individual's identity, which is formalized by an increase in utility. It is widely acknowledged, not only among psychologists, that expressive behavior, of which terrorism can be regarded an extreme form, is one category of behavior in which actions are primarily driven by the will to (re-)establish one's identity or self-esteem.²¹ We introduce this component via the term $\rho(r_i)$, which is multiplied with the negative impact $\eta(P)$ to capture the retaliatory nature of the reaction. We assume that the utility gains from showing a reaction have decreasing positive marginal returns, which turn negative after a certain threshold has been reached. Reactions beyond this level will lower utilities again as individuals may have the feeling of "having overdone" things.

Finally, showing a reaction is usually accompanied by expected costs, which depend on the intervention policies P and the reaction r_i . If the intervention is rather harsh, even small reactions to it may be punished heavily. If it is rather lenient, punishment may be relatively moderate. We include these expected costs by the term $c(P, r_i)$. Figure 2.2 illustrates the utilities deriving from different reaction levels to a given level of P for different types θ_j , θ_k , and θ_l where $\theta_l > \theta_k > \theta_j$. The individually optimal reactions, under consideration of the expected costs, are included as r_j^* , r_k^* , and r_l^* . The dashed decreasing part of each curve should illustrate the fact that beyond the optimal response people may have the feeling of "overdoing things", and hence suffer utility losses beyond the individually optimal reactions r^* . Because any optimal level of response including non-negative costs will not take place in this region, we exclude it from analysis. Note that the lowest type illustrated in figure 2.2 is deterred: He derives no positive net utility from showing any reaction $r_j > 0$. Figure 2.2 depicts the special case of linear costs. However, our analysis is not restricted to the case of costs that are linear in the individual's reactions r_i .

For the ease of representation, we will in the following drop the index i in the general case and only use it when necessary.

²¹The term "self-esteem" is borrowed from Loewenstein (1999). In an economic analysis of extreme mountaineering, he identifies four possible reasons for why humans deliberately choose to face the serious threat of death: self-signaling (self-esteem), goal completion, mastery, and meaning. Extending his analysis to everyday life, he notes that these four reasons "constitute extremely important motives in human behavior" (434). He also criticizes that these motives have been eschewed in economic utility functions "not because their importance is denied, but because they are difficult to formalize in decisiontheoretic terms" (317).

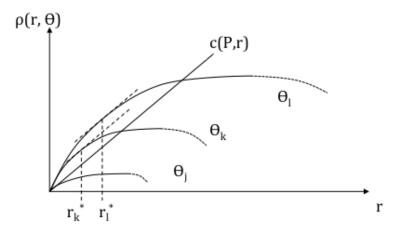


Figure 2.2: Individually optimal reactions

2.3.3 Deterrence and Reactions

From equation 2.2 it immediately follows that only those individuals will show a reaction, who will gain a positive net utility from doing so. Formally, all types showing a reaction will have to satisfy

$$\theta \ge \underline{\theta} = \frac{c(P, r)}{\rho(r)\eta(P)}.$$
(2.3)

The denominator of the right hand side of 2.3 depicts the gains from showing a reaction, the numerator the costs from doing so.²² Inequality 2.3 will not necessarily be satisfied by all individuals, i.e. some individuals are possibly deterred. Further, lower types are more likely to be deterred than higher types.

Any level of P may induce a certain fraction of the population in the affected country to show a reaction. This fraction can be formalized as:

$$F = \int_{\underline{\theta}}^{1} f(\theta) d\theta.$$
(2.4)

Obviously, the fraction of reactionaries is at least one component that is of interest for the intervening country. Additionally, it may be interested in the reaction *intensity* of the reactionaries. Note that each type will have a unique optimal reaction, $r_i^* \in [0, 1]$. The optimal reactions of all types together follow a function $\phi(\theta, r^*)$. Let \underline{r}^* be the optimal

²²Note that the initial loss in utility, $\eta(P)\theta$, is not considered as it is sunk.

reaction of type $\underline{\theta}$ and \overline{r}^* the optimal reaction of type $\theta = 1$. The "overall reaction" of the population, which is also represented as R in 2.1,²³ may then be formally depicted as

$$R = \int_{\underline{\theta}}^{1} \phi(\theta, r^{*}) f(\theta) d\theta.$$
(2.5)

2.3.4 Change in Policies

Quite obviously, policies to counter terrorism change over the course of time. It is well known that politicians might have an incentive for diversionary politics. Such politics may be easier to implement after terrorist attacks due to "rally round the flag" effects (Mueller 1970). In terms of our model, these changes would be captured by changes in the weight politicians attach to foreign policies, α . Moreover, there is evidence that after terrorist attacks the affected population favors hard intervention. Pape and Feldman (2010: 323), for instance, find that American support for war in Iraq increased by 18% after 9/11, a change that they couldn't find explained by attitudes on Iraq's possible possession of weapons of mass destruction which remained basically unchanged.

Ceteris paribus, an increase in P will possibly lead to an increase in the number of deterred individuals if this increase in harshness is accompanied by larger utility losses from showing a reaction than utility gains from doing so. Formally, $\underline{\theta}$ will react to changes in P according to:

$$\frac{\partial \underline{\theta}}{\partial P} = \frac{c_P \eta(P) \rho(r) - \eta_P \rho(r) c(P, r)}{(\eta(P) \rho(r))^2}.$$
(2.6)

Intuitively, only if the percentage change in marginal costs is larger than the percentage change in benefits from a reciprocal reaction, an increase in harshness will lead to an increase in deterrence in the form that the number of people showing a reaction will decrease.

It need not be, however, that an increase in deterrent means such as harshness will be successful because the gains to be made from reacting may increase. The interior solutions to individual utility maximization may help to figure why. Maximizing utility

 $^{^{23}}$ Note that this static aggregation does not take spillover effects into account. These effects occur once policies *change*.

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by variation of r yields the optimum value as an implicit function of r. More specifically,

$$\frac{\partial u}{\partial r} = \eta \rho_r \theta - c_r = 0. \tag{2.7}$$

There may exist a threshold value of θ separating individuals showing a reaction from those not showing a reaction. This threshold value is defined as

$$\tilde{\theta} = \frac{c_r}{\eta \rho_r}.$$
(2.8)

The change in $\tilde{\theta}$ induced by changes in P will be positive iff:

$$\frac{\eta_P \rho_r}{\eta \rho_r} < \frac{c_{rP}}{c_r}.$$
(2.9)

Similar to the analysis of 2.6, we find that the percentage change in the marginal benefits of reacting have to be overcompensated by the percentage change in marginal costs to induce a deterrent effect of harsher policies.

2.3.5 Radicalization

Obviously, the fact that people are actively deterred is desirable from a policy-makers point of view. In the end, deterrence is at least one of the goals aimed at by harsher policies.²⁴ However, this deterrence at least comes at the cost of what might be labeled *statistical radicalization*. That is, the average type of individuals which are not deterred increases due to the lower types' being deterred.

Figure 2.3 illustrates this effect for two different critical types $\underline{\theta}$. In the upper case, comparatively many reactionaries are present (i.e. the value of $\underline{\theta}_1$ is low), in the lower case these are reduced in number (i.e. $\underline{\theta}_1 < \underline{\theta}_2$). Consequently, the average value of θ for reactionaries, included as θ^0 in both cases, is larger in the lower case than in the upper case.

This may appear a trivial and irrelevant factor. It should be noted, however, that the homogeneity of a group has been argued to play an important role in the ability of this group to coordinate (Olson 1965). Hence, the more radical, undeterred types in the society may now find it easier to coordinate their reactions.

²⁴Other goals could for instance include taking revenge or simply showing action.

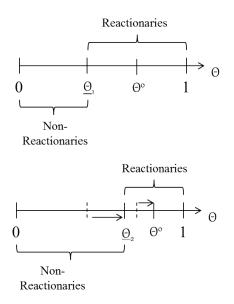


Figure 2.3: Statistical Radicalization

Besides the statistical radicalization, there might also evolve a *de facto* radicalization of individuals not deterred. Applying the implicit function theorem to 2.7 above shows that, for interior solutions, an increase in harshness may be accompanied by either an increase or a decrease of reaction intensities. Formally, the harshness of the intervention will affect the reaction intensity according to:

$$\frac{dr}{dP} = -\frac{\eta_P \rho_r \theta - c_P}{\eta \rho_{rr} \theta - c_{rr}} \tag{2.10}$$

Note that, again given that an interior solution to the individual utility maximization problem exists, the denominator corresponds to the second-order condition for maximization and will therefore be negative. Hence, the sign of the overall effect will depend on the numerator. Again, a critical type separates the two cases of an increase or decrease in reaction intensity. This type is defined as

$$\hat{\theta} = \frac{c_P}{\eta_P \rho_r}.$$
(2.11)

Types $\theta_i > \hat{\theta}$ will show an increased reaction intensity, whereas types $\theta_i < \hat{\theta}$ will show a reduced reaction intensity.

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2.4 Identity and Terrorism - Anecdotal Evidence

In light of the difficulties to directly measure the relevant components, as we outlined in the introduction, we turn to anecdotal evidence and results from other disciplines in this field. In particular, we will present evidence that harsh foreign intervention will affect the support of terrorist groups by the local community, and that this will be caused by a loss of identity, to stick to the language of our model. Further, we will provide evidence that harsh intervention will have a radicalizing effect on the terrorists not actively deterred. Finally, we will report of cases where the overall level or terrorism has increased due to foreign intervention.

There is ample evidence that terrorism is bolstered by factors external to its home country or region of origin. Important factors include economic isolation, and (disfavoring) foreign policies of other countries against one's home country (Kristof 2002). Both factors may reduce the opportunity costs of terrorism, and hence increase its occurrence (see Freytag et al. 2011: for an elaboration of this argument). Further, (Kristof 2002) mentions the experience of injustice and humiliation as important causal factors for terrorism. The modernization of societies may also have played a role, especially among "tribal cultures". According to this argument, tribal communities see their values and identities endangered by the imposition of state authority. Following their norms, they call for honor and revenge: "the acts of terror or violence directed at the US or its allies are set off as much by revenge based on values of tribal honor as by extremist ideologies" (Ahmed 2013).

Intervention directed at countries actively or passively sheltering terrorists may make things worse in driving former supporters into opposition. While the 9/11 attacks were initially condemned by the Muslim world,²⁵ Gerges (2006) finds: "Ordinary Muslims, not just Islamists and jihadists, view the "War on Terror" as a war against their religion and values. Many Muslims who had initially condemned Al Qaeda and 9/11 are having second thoughts about bin Laden's fight against the Americans and their allies. Bin Laden has gained credibility in their eyes." Public opinion polls further demonstrate marked support for Al-Qaeda (Jones and Libicki 2008).²⁶ Since verbal support might not materialize in

 $^{^{25}}$ Directly after the 9/11 attacks, on September 12, 2001, "leaders of Middle Eastern nations, including U.S. foes Libya and Iran, have condemned the terror attacks on the U.S." The only exception was the Islamic militant group Hamas (CNN 2001).

²⁶"In a poll released in 2007 by the University of Maryland's Program on International Policy Attitudes, for example, 25 percent of Egyptians interviewed said that they supported al Qa'ida's attacks on Americans and shared its attitudes toward the United States. Another 31 percent of Egyptians opposed al Qa'ida's attacks on Americans but shared many of its attitudes toward the United States. Furthermore, 40 percent of Egyptians, 27 percent of Moroccans, 27 percent of Pakistanis, and 21 percent of Indonesians had positive feelings toward Osama bin Laden" (Jones and Libicki 2008: 114f.).

concrete action, these polls have to be regarded with caution. Nonetheless they mirror the populations voiced opinion towards terrorist groups. Nonetheless, a US intelligence report finds that the number of militants in Iraq rose after the US intervention (BBC 2006). Alarmingly, *foreign* insurgents are increasing in number and are not only traveling to be part of terrorist movements but also "carrying out the most heinous attacks" (Krueger 2007: 84). That is, the domain of people who's identity has sufficiently been affected to render a response adequate has increased.

Given the fact that terrorism is, at least in parts, initiated by immaterial motives related to identity, increasing harshness to deter potential delinquents may prove ineffective or even counter-effective. Such policies might bear unintended consequences and provoke terrorist groups to engage in more terrorist activity. The reaction of former US president George W. Bush to the 2001 Al-Qaeda suicide attacks upon the US consisted of immediate military retaliation. On October 7, 2001, US and British forces started the war in Afghanistan. Aggregated data show that terrorist attacks in Afghanistan significantly rose after the war in Afghanistan began. A similar development occurred after the US invasion in Iraq (figure 2.4). Again, the data cannot guarantee causality, and the mere presence of US citizens facilitates attacks, which may not have been feasible before. But what has to be admitted is that the invasion did not reduce terrorist activity within the invaded country, not even after a longer period of occupation. Rather, it seems that the invasion provoked more terrorist activity.²⁷

Tougher counterterrorism obviously at times triggers tougher reactions. This also holds for the case of suicide terrorism, which undoubtedly poses the most extreme form of terrorist behavior. Pape and Feldman (2010) find that a Chechen suicide terrorist campaign was triggered by a particularly harsh Russian intervention. The authors emphasize that "although the Chechens have a long history of conflict with Russia, the suicide terrorist campaign did not erupt until the brutal Russian occupation of 2000; it then increased in response to counterterrorism operations in 2002 and 2008" (251).²⁸ A similar picture shows in Lebanon. The authors conclude that the "principal cause of suicide terrorism in Lebanon is foreign military occupation" (196). Moreover, the authors find that Pakistan and Sri Lanka were both affected by interventions that were regarded as illegitimate and to which an increase in suicide terrorism was a response.

However, there is also evidence that some well targeted counterterrorist measures do not provoke retaliation but deter effectively. Regarding suicide attacks in Israel,

 $^{^{27}}$ Note also that the numbers only give a very incomplete picture as they do not reflect the quality of each single attack.

²⁸ Note that this example relates to the general military approach and not to the use of a specific means, as it was the case in the introduction.

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Benmelech et al. (2010) find that *punitive* house demolitions in Israel against terrorists directly cause a significant decrease in the number of suicide attacks, although this effect dissipates over time. In terms of our model, it could be argued that punitive action is justified by previous harm, rendering the house demolition more tolerable. Put differently, punishing offenders within one's group does not violate in-group norms, and thus causes no harm to the identities of the group members. *Precautionary* house demolitions against people not related to terrorists, on the other hand, cause an increase in the number of suicide attacks. Presumably, such action is perceived as less legitimate than the punitive house demolitions, thereby inducing a loss in identity – and thus causing terrorist counteractions.

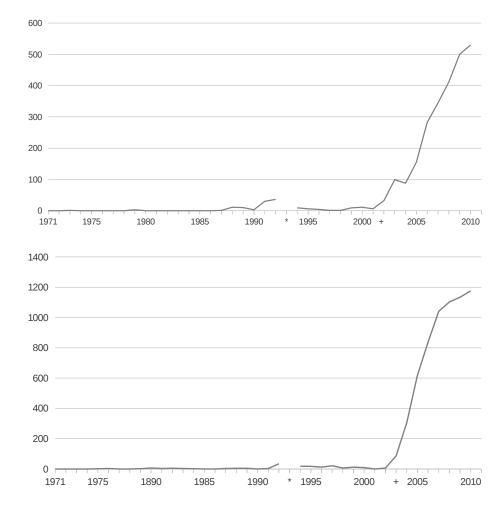
2.5 Concluding Summary

In this article, we offered an identity economic approach to international terrorism. The main argument is that international terrorism is driven by identity concerns, and is thus expressive in nature. Expressive behavior, in turn, is not easily shaped by material incentives. Focusing on a policy of deterrence to reduce the level of terrorism may thus not only be ineffective, but even give rise to perverse effects in the form of an increase in terrorist attacks. We supported our argument in reference to research from other social sciences.

When tougher policies are likely to defy terrorists, this demands a new pragmatic perspective on expressive crime, which is based on social costs. As long as extrinsic counterterrorist measures are regarded as illegitimate, extremist groups will enjoy the support of their social community. Instead of concentrating on tough penalties to deter terrorists, we promote a more holistic approach.

The first step is to not violate the autonomy of other countries. Cooperation with local forces, institutions, and authorities signals respect to the local population. Such cooperation and understanding is central to effectively fight the terrorist ideology and undermine social support for terrorist activity. This basically rules out massive military intervention. Rather, assistance of foreign governments ought to be called for. If assistance is hard to gain, means of intelligence to target specific individuals while minimizing collateral damage are an alternative option. Transparency could further reduce potential losses of identity: if the local people get to know about the illegal acts of the targeted individuals, they might agree that these have "overdone it", and that punishment is legitimate. If possible, this punishment also ought to be transparent and respective of the local norms, which rules out selective killings but calls for the use of local courts. When Harsh Policies Backfire - Identity Economics and International Terrorism

Obviously, such policies are aimed at the long run and associated with large costs, whereas the current counter-terrorist policies aim for short-run success. However, if policies are not effective in the short run, and may even be detrimental to the desired aims, we regard bearing the costs associated with a more holistic approach worthwhile. When Harsh Policies Backfire - Identity Economics and International Terrorism



Appendix

Figure 2.4: Absolute number of terrorist attacks per year in Afghanistan (upper figure) and Iraq (lower figure), *Source*: Global Terrorism Database, 2011,* data for 1993 not available, + war begins

Chapter 3

International Land Acquisitions and Hal Varian's Concept of Fairness[‡]

Abstract

During the 2007-2008 global food crisis, the prices of primary foods, in particular, peaked. Subsequently, governments concerned about food security and investors keen to capitalize on profit-maximizing opportunities undertook large-scale land acquisitions (LASLA) in, predominantly, least developed countries (LDCs). Economically speaking this market reaction bears a highly desirable potential, as it should (1) improve food security and lower prices through more efficient food production while (2) host countries benefit from development opportunities. We provide an ethical perspective on the matter drawing on Hal Varian's (1974) concept of fairness. Approaching LASLA into Sub Saharan LDCs as a socio-economic reform redistributing land from the local smallholders of LDCs to investors, our partial analysis focuses only on these two affected groups. We find that LASLA predominantly contradict Varian's concept in practice due to the insignificant improvements for local smallholders and sometimes even human rights violations. Then investigating whether and how international law can help overcome the shortcomings, we conclude that even though respective mechanisms exist, it is hardly possible that it will produce fair outcomes in the near future.

Keywords Agricultural Investments, Ethics, Economic Fairness

JEL D63, O13, Q17, Q18

[‡]This work is co-authored with Luis Tomás Montilla Fernández from the Institute of Law and Economics, University of Hamburg. A similar version has been published as "John Rawls's Theory of Justice and Large-Scale Land Acquisitions: A Law and Economics Analysis of Institutional Background Justice in Sub-Saharan Africa", *Journal of Agricultural and Environmental Ethics*, 26(6):1223-1240, 2013. We owe our sincere thanks to Lieske Voget-Kleschin, Konrad Ott, Anne van Aaken, and Manfred J. Holler for their generous support and valuable discussions.

3.1 Introduction

This article applies Hal Varian's concept of fairness to the international phenomenon of large-scale land acquisitions (LASLA) in predominantly least developed countries (LDCs). In the context of this article, LASLA describe the acquisition or leasing of large areas of farmland by foreign investors.¹

Despite the huge number of media reports but also journal articles in different fields that have been published over the last years, systematic academic coverage on this topic is still needed. For a well-summarized literature review we refer to Palmer (2011). From an academic point of view, publications by Cotula et al. (2009), Cotula (2011), von Braun and Meinzen-Dick (2009), The Oakland Institute (2011a), Deininger et al. (2011), and Anseeuw et al. (2012) are the most representative. Nevertheless, articles approaching LASLA from an ethical perspective are almost completely missed.

LASLA promise to increase agricultural productive efficiency and thus overall food security (Häberli 2012). Moreover, they offer attractive development opportunities for LDCs in four dimensions: infrastructure, jobs, technology, and knowledge. Ideally, investors would reclaim fallow or underused land. Not necessarily affecting the local smallholders directly, they would benefit through indirect effects such as better infrastructure and new jobs. Such a win-win situation would improve the situation of all involved parties (Cotula 2010).

We started with a media survey concentrating on daily and weekly newspapers to obtain a good impression of the issue. We learned that even the well-established media predominantly scandalize the issue by highlighting human rights violations, mostly ignoring possible benefits of the developments linked to LASLA.² This unbalanced perception further calls for scientific analysis, in which a lawyer and an economist seek to balance the legal and human rights perspective against the economic development prospects applying economic methodology and a legal analysis. In order to merge our methodologies on a higher level, we draw on the ethically motivated considerations of Varian (1974). Whether LASLA can be regarded as ethically correct is an ongoing controversy. We seek to understand whether the existing common perception is well-founded and can be

¹Different definitions of LASLA exist. However, they are often loaded with the particular interests of the defining parties (be it Non Governmental Organizations (NGOs), investors, host or home governments, etc.). Thus, we decided to stick to the broadest definition possible: LASLA are large-scale investments with the interest of large-scale agricultural use of the land. Investors are often, but not necessarily, foreign parties and they mainly invest into LDCs.

²Some of the consulted articles: von Braun and Meinzen-Dick (2009), Sharife (2009), Schweizer Fernsehen Video Portal (2011), Tagesschau.de (2011), De Schutter (2009a, 2011), The Guardian (2011a,c,d), and The Economist (2011a).

supported or rejected with the help of Varian's concept of fairness.

Since LASLA redistribute the resource land from local smallholders (i.e. the current de facto land owners) to investors, we approach LASLA as a socio-economic reform. We concentrate our partial analysis on only two parties: the investors seeking profit opportunities in cheap arable land, and the local smallholders willing to provide the land because of the development opportunities in sight. Both parties can greatly benefit from LASLA and we consider it important to emphasize its desirable potential. A coercive contradiction between economic "inherent necessities" and ethical claims does not necessarily exist (as some might claim).

We are aware that more actors play a role in LASLA. For example, home governmental agencies help their investors through international negotiations, host governments actively seek for foreign investment, and specialized agencies act as intermediaries between the parties. However, our analysis defines these other parties as mere intermediaries between the crucial parties involved in LASLA.

Empirically sound data on LASLA projects are still poor. This situation continuously improves as LASLA are covered more systematically.³ But to this day, the reliability and objectivity of the data remains disputed. We therefore rely on World Bank and academic publications as well as news coverage from established media.

In particular, we base our analysis on LASLA investment contracts for Sub-Saharan Africa in which the interests of the involved parties are committed to paper and which are conventionally kept concealed. Analyzing the contracts, we find that these contracts balance the interests of both parties unequally, i.e. while investors capitalize on land deals, interests of the local population are hardly respected. We investigated 81 Sub-Saharan LASLA projects in Ethiopia (21), Mali (5), Mozambique (53), and Sierra Leone (3). Although Sub-Saharan Africa represents only one of the least-developed areas in which LASLA take place,⁴ the investigated contracts give a sound general impression of the majority of LASLA projects.⁵

³See for example, the Land Matrix project aiming to collect data on LASLA, "a global and independent land monitoring initiative that promotes transparency and accountability in decisions over land and investment", on http://www.landmatrix.org/ (November 6, 2013).

⁴Deininger et al. (2011) and Anseeuw et al. (2012) report that Asia is the most affected region, followed by Sub-Saharan Africa and Latin America.

⁵ The contract time ran from 25 to 50 years. Note, however, some references include contracts lasting for a period of between 50 and 99 years (Cotula 2011). The contracted area in the predominantly agricultural contracts ranged from 431Ha up to 150,000Ha and the leasing rates varied from \$0 to \$12.38 (median \$.54), respectively from Ethiopian Birr (ETB)158 to ETB712.61 (median ETB158) per Ha per month. In June 2012, ETB1 was worth \$.0565. This would translate into prices from \$8.927 to \$40.26 per Ha and month. However, the ETB depreciated significantly (about 50%) against the \$ in the last 10 years, which is why we here provide the ETB prices. Despite the fact that the analyzed contracts stem from only five countries, they give a good general impression of how LASLA are usually contracted. The

The lacking legal representation of local populations affected by LASLA support the media perception that in the majority of LASLA, win-win situations are not realized. Rather, while investors are likely to benefit highly from the cheap land, improvements for the local smallholders are not even part of LASLA contracts.

Our argument is structured as follows: first, we briefly familiarize the reader with Varian's concept of fairness; second, we analyze LASLA in this context and how international law could remedy the undesirable effects of LASLA; third, we critically discuss the legal possibilities to improve the current situation surrounding LASLA. The last section concludes.

3.2 Varian's Concept of Fairness

Varian highlights the symmetry in distributive justice as an important ethical desideratum. Applying some standard tools of economic theory to formal definitions of fairness, he derives the three concepts equity, envy, and fairness. The distribution of available resources among members of the society is equitable if no agent prefers the bundle of some other agent to her own. In this case, the allocation is envy-free.⁶ But another agent envies her if he does prefer her bundle. An equitable and Pareto efficient allocation is defined as fair. It should be noted that the concept of "envy" is not a mental or emotional experience. Varian is referring to a rational calculus based on interpersonal comparison and potential exchange.

Varian is aware that this definition ignores what might otherwise be regarded as central to fairness. Focusing only the agents' preferences and the available resources, he does not pay regard to factors like the strengths of preferences, the moral worth of individual agents, etc. Nevertheless, he defends the simplicity and the minimum of required information as a particular strength of his approach.

Starting out from a fixed amount of resources, Varian (1974: 70) concludes that "when the resources are fixed and no information but preferences is available, it is only natural to assume that everyone has an equal prior claim to the social resources. Thus any perceived asymmetry by the agents, such as envy, cannot be tolerated."

He then extends his analysis to a state in which *production* can expand these resources. Varian holds that a fair distribution of this product is possible as long as it fulfills the

original language of the contracts is English, Amharic, and French.

⁶ Varian's concept of equity is based on Foley (1967). In more detail, Foley (1967: 74f.) holds that "an allocation is equitable if and only if each person in the society prefers his consumption bundle to the consumption bundle of every other person in the society. [...] In other words, ask each person to imagine changing places with every other, not by exchanging incomes, but by experiencing the material aspects of that person's life. If no one is willing to change, the allocation is equitable."

mentioned criteria for fairness. However, Varian highlights that this situation is radically different since production inserts an *inherent asymmetry* to the problem of distributive justice. He reasons that by being productive, individuals can contribute differently to the available resources. This, he points out, is the origin of the "deepest problems of distributive justice: How do we divide the social product when agents can contribute differently to the formation of that product?" (Varian 1974: 71). The problem lies in the differing individual ability to be productive. After some discussion, Varian (1974: 75) concludes a "fundamental ambiguity of equity in the production case."

Even though we might not be able to clearly identify a fair outcome of LASLA, we can determine an outcome that is not fair. According to Varian, such an outcome would then be inequitable (i.e. not envy-free) or even Pareto inferior.

3.3 Applying Varian's Concept of Fairness to LASLA

3.3.1 Method of Application

From a basic utilitarian standpoint, it might be acceptable that the local populace suffers (temporary) severe disadvantages because of LASLA. Such disadvantages, even including human rights violations, could be outbalanced by long run benefits for a larger population.⁷ However, this "acceptance" can be challenged from both a legal and an ethical perspective. The classical legal thought angle is clear: the host governments signed international human rights conventions, which are also reflected in the national constitutions, and are thus limited in their behavioral freedom in that they have to prohibit, and refrain from, human rights violations on their territory (De Schutter 2009b, Cotula et al. 2009). We aim to elaborate on the ethical perspective and reason throughout our analysis that both the processes of LASLA as well as its short and medium term consequences are critical from the perspective of Varian's understanding of fairness.

Varian's concept of fairness has the merit that we can analyze complex constellations partially. Only such a partial analysis can live up to the complex phenomenon of LASLA. Throughout our analysis, we focus on only two parties who are affected by LASLA, namely the foreign investors and the local smallholders. Although society consists of many more parties, our focus is appropriate for two reasons. First, we have sufficient information on both relatively homogeneous parties. This does not hold for other affected parties. Second, we can assume that the local smallholders are the poorest identifiable

⁷ Utilitarianism as a philosophical concept can be defined as "the doctrine that an action is right insofar as it promotes happiness, and that the greatest happiness of the greatest number should be the guiding principle of conduct" (McKean 2005).

party affected by LASLA. When LASLA promise economic improvements, it would be hard to understand from an ethical standpoint why these smallholders should not benefit.

Indeed, the populations of LDCs are among the poorest people of the world population according to GDP per capita (World Bank 2013). Local smallholders are usually subsistence farmers who can hardly survive without external help (e.g. food donations from international organizations). On the other hand, the investing parties mainly originate from more developed countries and dispose of the necessary means to effectuate huge investments in arable land. As economically rational individuals or organizations they chose LASLA from a pool of investment opportunities. In this light, it can be assumed that LASLA will pay off for this side at one point in time, otherwise they would not have invested. Consequently, only the local smallholders deserve a more detailed examination.

It is unrewarding to scrutinize the current endowment of the parties in question. There is no doubt that the significantly poorer smallholders would envy the wealthier investors. A more partial analysis is expedient, namely to look at the *distribution of the efficiency* gains resulting from LASLA.

In the context of this analysis efficiency gains are possible and both parties do contribute to these gains. While the smallholders provide the resource land, the investing parties contribute the knowledge and technology for cultivation. A clearly inequitable outcome would distribute these gains to *only one* party. As we identified the investors as the economically stronger party, an inequitable outcome would not make the smallholders better off. Moreover, a Pareto inferior outcome would leave the smallholders worse off. Identifying such outcomes, LASLA would have to be rejected as not fair.

Thus, in order to identify whether LASLA can be regarded as not fair, we first have to investigate whether efficiency gains have been realized. Second, we shall scrutinize whether and how these gains are distributed between the two parties of our analysis.

3.3.2 Realizing Efficiency Gains

Proponents of LASLA never tire to claim efficiency gains of LASLA. They observe that agricultural productivity in LDCs is low and that land even lies idle, e.g. as it is simply out of reach for the underdeveloped cultivating methods prevalent in LDCs. Developed technology can help (1) to cultivate idle land and (2) to increase overall productive efficiency.

Even though fertile land in developing countries is often underused or fallow, it did not attract the investments required for cultivation. Often, the necessary incentives were missing since property rights to the land were poorly or not correctly defined. From a law and economics perspective, LASLA transform property rights. Given the often unclear property rights situation in the host countries, one might even say that LASLA help to define property rights for the first time. In more concrete terms, local agencies transform the previously existing property rights system, conform to investor requirements (Cotula et al. 2009).

Having transformed local property rights, international investment law, which is prima facie the applicable jurisdiction, offers investor-oriented protection mechanisms. Such protection mechanisms are in most of the cases guaranteed through the existence of bilateral investment treaties (Griebel 2008). These treaties are interstate contracts that guarantee a special protection for foreign investors (Reinisch 2009b). The most important advantage is the minimization of political risks, namely discrimination, expropriation, access to the justices, and so on.

LASLA as an institution makes these investments into LDCs possible through a clear definition of property rights, the possibility to transfer property rights from one owner to another, and the protection of the investor through international investment law. One could argue that in fact the initial owners were the local smallholders in the host countries whereas the final owners are the investors.⁸ The definition of property rights is a desirable achievement of LASLA. It helps to achieve a re-allocation of economic factors towards more effective use and enables the market mechanism to produce more needed food and to increase world food security. But this is the theoretical part. Serious problems remain in practice.

Particularly problematic in the transformation process are the essential biases *in favor* of the investors. They affect the socioeconomic environment for the local population, because this transformation process is apparently made ignoring the precedent system and existing structures (Cotula et al. 2009). Given the lack of of a formal title to the land, de facto owners often cannot defend themselves against a factual expropriation, simply because they cannot argue for a legal expropriation (Cotula et al. 2004, Gehne et al. 2011). Smallholders' rights are protected on the constitutional and international level: most of the African countries do recognize the traditional property right indigenous people have on the land they cultivate.⁹ But this constitutional protection does not find further application, since sometimes procedural norms are missing or it is almost impossible

 $^{^{8}}$ Even when land is not always sold, the fact that lease contracts are made for 99 years we assume that the short run generational effects are almost the same. See Cotula (2011) for a description of the investment contracts.

⁹ Internationally, the right of indigenous people is regulated in a specific UN declaration on the Rights of Indigenous People. The declaration was adopted by a majority of 143 states in favor (most of sub-Saharan countries adopted the convention), four votes against (Australia, Canada, New Zealand, and the United States) and eleven abstentions (Azerbaijan, Bangladesh, Bhutan, Burundi, Colombia, Georgia, Kenya, Nigeria, Russian Federation, Samoa, and Ukraine).

for the affected to access the local justice system (Schultheiss 2010). Thus, even when protection is guaranteed at the constitutional level, this does not create incentives to protect local property rights: in cases of expropriation, compensation mechanisms are non existent or simply not applicable due to weak protection mechanisms of property rights (Deininger et al. 2011).

As mentioned, a significant achievement of LASLA is the protection of investors under investment law. This legal jurisdiction, however, does not allow the original owners (local smallholders) to sue either the state or the investor because of the violation of property rights.¹⁰ This effectively means that even when the existence of the investment is due to a wrongful act, it is not possible to reverse the action.

So far, the described problems amount to issues of compensation. It is well possible that even expropriated smallholders can be remunerated through the efficiency gains. However, in the majority of cases there are no such gains when the projects have not been administered as the World Bank adds for consideration:

"In many cases the announced deals have never been implemented. Risks are often large. Plans are scaled back due to a variety of reasons including unrealistic objectives, price changes, and inadequate infrastructure, technology, and institutions. For example, we found that actual farming has so far only started on 21 percent of the announced deals. Moreover, case studies demonstrate that even some of the profitable projects do not generate satisfactory local benefits, while, of course, none of the unprofitable or nonoperational ones do" (Deininger et al. 2011: XIV).

Moreover, in many cases the investors are given not only fallow land but also the land that has already been cultivated by local smallholders and was their livelihood.¹¹ Such land is usually located on flood plains, close to water supplies, and with a higher soil quality. Thus, it needs less reclamation than other areas, where reclamation is only possible with developed technology and knowledge. In order to cultivate the land, local communities have to be displaced. These resettlements might be accompanied by human rights violations against the most vulnerable individuals, who will be inevitably worse off after the process (Matavel et al. 2011, The Oakland Institute 2011b, De Schutter 2011).

¹⁰ This is because individuals are not considered as subject of international investment law. Even when in some cases tribunals accepted the participation of some organizations as amicus curiae, their relevance is questionable (Dolzer and Schreuer 2008, Reinisch 2009a).

¹¹ This effect is also stated by Deininger et al. (2011: XXXIII f.): "If investments generated profits, social impacts depended not only on the magnitude of benefits, but also on the mix of different types of benefits. For example, entrepreneurial and skilled smallholders could gain from jobs created by an investment, while vulnerable groups or women lost access to livelihood resources without being compensated. This illustrates the importance of clearly addressing distributional issues upfront."

To sum up, as far as LASLA are scholarly covered to this point, the resulting efficiency gains are not as substantial as promised and expected. As it looks now, investors can expect to harvest profits today or speculate on future profits while the local smallholders' wealth remains unaffected if it does not decline. This cannot be defended as fair from the standpoint of Varian. Nevertheless, a more detailed analysis of the distribution of efficiency gains is needed to conclusively evaluate LASLA from the perspective of Varian.

3.3.3 Distributing Efficiency Gains

Proponents of LASLA also never tire to promote benefits for smallholders from LASLA, which should materialize along the four dimensions infrastructure, technology, knowledge, and jobs.

With regards to infrastructure, the respective areas have to be prepared for agricultural cultivation. This includes leveling but more importantly watering infrastructure. Conventionally, the agricultural standards in LDCs do not dispose of watering infrastructure (accessing, storing, and distributing water) to irrigate areas which are remote from direct water access. Modern technology could thus exploit these more remote areas for agricultural production. Moreover, crops have to be transported, which requires a road system. Depending on the respective crops, some might still be cultivated by smallholders. With better access to water and the possibility to transport the harvest on a new or better road network, e.g. to the nearest or even further away markets, smallholders benefit directly.

As far as technology is concerned, many crops will be cultivated in large monocultures requiring modern agricultural technology and machinery. Besides the mere transfer of technology, it requires maintenance, repair, and supplies. Access to such a technological infrastructure might benefit smallholders directly, or they might benefit through the secondary effects of technology infrastructure, such as better equipped hardware stores or tool shops.

With respect to knowledge, LASLA aim at cultivating land with the standard of the developed world. In some cases, local smallholders might have special knowledge that will benefit from LASLA by being integrated into the production process. In other cases smallholders will benefit from the knowledge of the investors, like the efficient use of fertilizer, watering, or pesticides. But transfer of knowledge is not limited to agricultural activity only. The areas for LASLA often are among the world's poorest, lacking even the most basic facilities for fundamental education like schooling. Together with local authorities in the host countries, investors promise¹² (but do not commit themselves

¹² For example, in 2011 The Guardian reported the statement of a project manager of Bangalore-based food company Karuturi Global regarding an investment project in Ethiopia: "We are building reservoirs,

in the contracts) to contribute very basic facilities like a school building for a local community of smallholders. In relation to the costs of preparing the land, such additional efforts are low but can significantly improve the conditions for the smallholders.

Finally, but probably most importantly, LASLA promise to create jobs in host countries from which smallholders benefit directly. First, in the agricultural production itself. Although some parts of it will require sophisticated machinery too complex for the smallholders' state of knowledge, harvesting will continue to depend on manual labor. Second, once crops are harvested, they also require low-skilled labor in processing, quality control, transportation, packaging, etc. Secondary jobs are likely to emerge once LASLA start to effectuate the agricultural projects held out in prospect.

However, not in one single contract did we find any specific regulations that could be understood as a political tool, oriented to achieve the goals promised to local smallholders either by the host governments or the investors before the signature of such contracts. Moreover, our analysis of LASLA contracts indicates that compensation is not sufficiently specified in the contracts. While infrastructure, technology or knowledge transfer were never mentioned, only ten of the contracts promised to create jobs (ranging from 42 to 4,500 for the largest 150,000Ha project, median 577).¹³ But since timelines are not defined that clearly regulate the starting point of the projects, it is not clear whether or in what way local smallholders are integrated into the projects. Consequently, their job security is not guaranteed.

It is worth to take a closer look at the contracted leasing prices. It is possible that even though land lies idle, smallholders are financially compensated for not cultivating their former land. We can conservatively assume that the monthly Ha-productivity lies at approximately \$300. The calculus builds on the estimation that smallholders in Sub-Saharan Africa live with approximately \$2 per day and cultivate approximately 1/5Ha.

dykes, roads, towns of 15,000 people. This is phase one. In three years time we will have 300,000 hectares cultivated and maybe 60,000 workers. We could feed a nation here." A local government officer in Gambella, an Ethiopian region at the center of foreign investment, emphasizes that relocation of smallholders is voluntary: "This year we will relocate 15,000 people to give them better access to water, schools and transport. [But] it is a coincidence that the investors are coming at the same time as the villages are being relocated. [...] We are not relocating people to give land to the investors. The problem is there is no infrastructure where they have lived. It's all voluntary." However, affected people complain that they have not been compensated or that they are told to wait: "We were promised a school, a health clinic and fresh water eight months ago. We only have one water pump so far" (The Guardian 2011c).

 $^{^{13}}$ In more detail, the numbers of jobs (per respective project size in Ha) were 42 (10,000); 84 (10,000); 300 (10,000); 577 (73,513); 577 (73,513); 628 (21,500); 670 (6,214); 2,200 (6,141); 4,500 (150,000) (one contract for a 30,000 Ha project gave no number for the promised jobs). The relative numbers of jobs per ha are 0.004; 0.008; 0.008; 0.008; 0.029; 0.03; 0.03; 0.108; 0.358 (rounded after the third decimal place).

Since monthly leasing prices range from \$.5 to \$12 (median \$.5) for Mali, Mozambique, and Sierra Leone, respectively \$9 to \$40 (Median \$9) for Ethiopia,¹⁴ we can conclude that these prices are significantly lower and not sufficient to compensate the smallholders.

When projects do not start, arable land lies idle. If smallholders are not provided with market access and the necessary means to buy food for themselves, this means that not enough food, in the worst-case scenario, is produced locally for the smallholders and that their food security is at risk. Furthermore, it is not guaranteed that the smallholders are sufficiently provided with water, accommodation, and access to education systems, health care, or social services, which are the most attractive promises made mostly by host governments.

A subsequent key problem is food security. As the host countries are amongst the world's poorest countries, their greatest concern should be to improve food security for their *own population*, especially the local smallholders. LASLA bears the potential to increase food production and hereby help building food security also for the host populations. However, as investors focus on profits they will only produce when a respective price is paid for their product. It is questionable whether the relatively poor countries can always afford the prices the producers demand. In the worst case, it is possible that even though food is produced and highly needed in the host countries, this food is then exported to buyers willing to pay a higher price. In such a case, global food security might be improved but not the food security of the smallholders of the respective host country.

Instead of correcting the wrongs of an underdeveloped market system, LASLA rather seem to replace the local market for local smallholders with a more functioning world market. However, the transfer result is exactly opposed to increasing food security for the smallholders, as the product is exported elsewhere instead of securing food to the poor local smallholders who might even face increased difficulties accessing food markets (Häberli 2012).

Crucial for the host countries is that the produced food, at least in part, helps the local smallholders. This can be guaranteed in two ways. First, investors commit themselves to sell a certain share of the production to the host countries at an agreed-upon price. Second, investors can contractually assure that in exchange for the access to land, they provide infrastructure and technology and teach local smallholders how to use both – potentially in exchange for even better leasing conditions. In this case, investors would directly help the capacity building in host countries. What the evidence shows, however,

¹⁴ The currency in LASLA contracts for Ethiopia was Ethiopian Birr and not \$, which is why we separate it from the other countries. For the exchange rate we use here see footnote 5.

this is often not realized (Andrianirina-Ratsialonana et al. 2011, De Schutter 2011, The Guardian 2011d). Due to the fact that such promises are made verbally only, it is from the legal viewpoint reasonable to think that investors did not have any honest interest in the improvement of local wealth. Even in cases involving well-intentioned investors, the legal framework of such investments does not provide incentives to fulfill such promises; therefore such promises are in most of the cases unenforceable.

We have to conclude that for the majority of LASLA smallholders obviously do not benefit but are even worse off after the investments are signed. This also cannot be defended as fair from the perspective of Varian.

3.3.4 The Agency Problem in LASLA

The two parties of our ethical analysis are the smallholders and the investors. However, in the contracts smallholders are represented by *agents*. Sometimes these agents are even formal legal owners despite the fact that the local smallholders use the land and thus have a customary legal claim. This might seem economically sound to keep transaction cost low as the investors cannot negotiate with every single smallholder. However, the constellation poses principal-agent problems when the governments or chiefs as agents pursue own interests rather than acting for their principals (smallholders).¹⁵

It is also worth noting that if host governments can raise tax revenues out of LASLA, it is questionable whether the government distributes these revenues in the interest of the local smallholders. As long as this continues, LASLA contradict the fairness requirements of Varian: instead of improving the economic situation for the rural population of the host countries, hereby lowering the wealth differences between home and host countries and between the host countries' wealthy elites and the poorer rural smallholders, LASLA might benefit only the already wealthy parts of each society. This should increase rather than reduce envy at least in Varian's technical terms that are based on comparison and exchange.

Deconstructing the situation in principal-agent terms, the main allocative problem

¹⁵Agency theory addresses problems emerging from agency relationships. Those relationships are defined as a contract under which one or more persons (the principal) engage another person (the agent) to perform some service on their behalf, which involves delegating some decision-making authority to the agent. The problems might arise due to the divergence of goals existent between the parties at contracting. The main goal of this approach is to find an efficient way to regulate principal-agent relationships by decreasing agency costs. These costs are defined by Jensen and Meckling (1976) as the sum of (1) the monitoring expenditures of the principal (2) the bonding expenditures by the agent and (3) the residual loss. Residual loss is the decrease in the welfare, which is experienced by the principal due to this divergence with the agent. It represents the potential gains from trade not realized because principals cannot provide perfect incentives for agents to do some task (Klein 2000). See Jensen and Meckling (1976), Breid (1995), and Klein (2000) for a closer approach to the principal-agent theory.

in the nexus of LASLA is two-dimensional. First, monitoring and control mechanisms, which would allow the principals to control the behavior of their agents, are not existent. Second, legal incentives, which would guarantee that agents take into account the interests of their principals, are missing as well.

The following section discusses the possible role of international law and sketches legal remedies to address these failures to adequately represent the smallholders' interests.

3.4 Discussing the Possible Role of International Law

From the legal positivistic viewpoint, problems produced by LASLA are a consequence of regulatory failures on both the national and the international level (Narula 2006). Yet, whether international law is the appropriate arena to deal with this issue needs to be considered.

Such failures incentivize the actors to opportunistic behavior, because of inappropriate incentives at the national level. In such cases, international law might play a subsidiary role in harmonizing contradicting interests and avoiding public order distortions. National law is therefore – given desirable institutional circumstances – the most suitable arena to deal with such legal failures. Nonetheless, on the one side national jurisdiction might probably fail, owing to the poor legal institutional situation of least developed countries. In such cases, international law is the proper jurisdiction to deal with such failures. On the other side, international law rigorously protects decisions taken by sovereign states. Therefore, the principle of self-determination of each sovereign state possibly collides with the international legal obligation of defending protected values such as human rights.

In this regard, we recommend empowering international law such that it can protect local smallholders whose basic rights have been violated, at least in human rights jurisdiction.¹⁶ We also suggest that it should not only be in the competence of public international law to sanction the violation of national rights (e.g. in cases of expropriation), it is also desirable to develop prophylactic mechanisms to avoid future legal failures. The problem we have to deal with is about the legal technique that might apply to: (1) make the expected right enforceable and (2) do not produce legal collisions between well-developed international jurisdictions, i.e. human rights, investment law, and trade law.

 $^{^{16}}$ Our suggestion is based on later developments in international law, i.e. the case of Kosovo, where the international community – after having proven the violation of human rights – has been increasingly willing to lift the protection created by the principle of sovereignty to protect victims of human rights violations.

Analyzing Article 2 (4) of the UN Charter, LASLA apparently is neither a matter of international law nor can it be encouraged as a part of the mandate of international organizations. Following the logic that each state is allowed to exercise its autonomous power, states have the faculty to decide the way to solve their internal problems.¹⁷

However, it is common knowledge that for highly protected values, like human rights, this principle does not hold. Technically speaking, the ratification of human rights treaties means that states grant part of their sovereignty to an external agent (international organizations). By delegating this kind of decision-making competence, states demonstrate their intention of compliance. Doing so, they allow external agents to apply sanctions in cases of non-compliance. Consequentially, in cases in which states violate protected rights, international organizations do have the mandate to act in defense of the victims.¹⁸

In addition to this jurisdictional argumentation, if we analyze the negative spillovers that are associated with LASLA – namely potential inobservance of local property rights and potential violation of human rights – the decision criteria would remain the same. For such cases international law has specific instruments that make its intervention possible without being considered an intromission. Nowadays there is no question at all that international law can act against violations of internationally recognized rights. In some cases the UN-Charter limited state sovereignty in favor of protection of violated rights as a prophylactic mechanism to avoid potential violations. This is for cases in which states do not observe their "Responsibility to Protect" human rights (Ruggie 2011). Albeit it is less probable that in the context of agricultural projects, e.g. genocide or crimes against humanity will occur, this does not mean that public international law has formal institutions

¹⁷ Art 2 (4) UN Charter: "The Organization and its Members, in pursuit of the Purposes stated in Article 1, shall act in accordance with the following Principles: [...] (4) All Members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the Purposes of the United Nations" (United Nations 1945).

¹⁸I.e. the Office of the High Commissioner for Human Rights (OHCHR) is mandated to promote and protect the enjoyment and full realization, by all people, of all rights established in the Charter of the United Nations and in international human rights laws and treaties. The OHCHR is guided in its work by the mandate provided by the General Assembly in resolution 48/141, the Charter of the United Nations, the Universal Declaration of Human Rights and subsequent human rights instruments, the Vienna Declaration and Programme of Action, the 1993 World Conference on Human Rights, and the 2005 World Summit Outcome Document. The mandate includes preventing human rights violations, securing respect for all human rights, promoting international cooperation to protect human rights, coordinating related activities throughout the United Nations, and strengthening and streamlining the United Nations system in the field of human rights. In addition to its mandated responsibilities, the Office leads efforts to integrate a human rights approach within all work carried out by United Nations agencies (Office of the High Commissioner for Human Rights 2013).

that can be used to avoid that such undesirable effects happen.

However, even when we do recognize the jurisdiction of public international law to solve problems arising by LASLA, it is still highly problematic to identify the factual border between the different areas of public international law. It leads to the dogmatic problem of fragmentation of international law.¹⁹ It is not possible under some circumstances to apply specific rules of one area without affecting another area. On the one hand this phenomenon has been highly criticized under the argument that it conduces to a regulatory chill out. On the other hand tribunals rarely see themselves as a competent institution to decide an issue where specific values, prima facie, are out of their jurisdiction. Maybe the most relevant example in this regard is the decision of investment tribunals on human right issues.²⁰

3.5 Conclusion

Our article aims to draw on Varian's idea of fairness to the factual situation in LASLA host countries. To sum up, we can argue that LASLA bear attractive socioeconomic potential. They are a possible means of improving productive efficiency and ultimately increase food security. Moreover, it has the potential to provide infrastructure, technology, knowledge, and most particularly it was propagated to create highly desired jobs in the economically underdeveloped host countries. In this theoretical light, LASLA is a desirable reform.

However, we conclude that LASLA, as a legal or even constitutional reform redefining property rights, do not realize their potential. In order to be fair from the perspective of Varian's concept of fairness, LASLA would have to result in a Pareto efficient and envy-free outcome. Given that smallholders are in the majority of cases worse off after LASLA take place, this result is not only Pareto inefficient, we also have to assume that smallholders will envy the investors in absolute terms, but also when they consider the changes that result from LASLA. Consequently, we conclude that LASLA are not fair according to Varian and have to be considered with respect to claims of (international) justice.

The almost complete lack of representation of smallholders' interests demonstrates

¹⁹ For some discussion about the fragmentation of international law see: International Law Commission (2006), van Aaken (2006, 2009), Benvenisti and Downs (2007), and Pauwelyn (2011).

 $^{^{20}}$ Even when this problem has been largely discussed in the literature, there is no clear tendency in the jurisprudence to support some of the proposed solutions. One solid solution has been proposed by van Aaken (2006, 2009). She proposed the application of interpretational techniques to stimulate the defragmentation of international investment law and therefore make it more unison to the international human rights and environmental regulations.

that LASLA do not aim to improve matters for smallholders. Looking at the investment contracts as legal framework of this reform, we find no evidence that smallholders' interests are considered except for relatively few job guarantees. However, these guarantees do not include a timeline, so we do not know when these jobs should be created. The only remaining hope is that economic progress also advances matters for local smallholders over time.

Investors are likely to profit from the deals. Thus, they should legally commit themselves to create the number of promised jobs at a specified pay and point in time. Analyzing more than eighty investment contracts, only very few contracts provided respective commitments, still being far too imprecise regarding timelines, not to mention salaries. Host countries have to understand that these details have to be contractually specified. However, the creation of new jobs is questionable: especially when investors will produce non-processed products using high-technology machinery, the contribution of human labor will lose importance. In such a case investments will not solve the problem of unemployment.

A main issue is that the bargaining positions of the host countries' representatives as well as their incentives to negotiate in the best interest of the population they represent have to be significantly strengthened. Scrutinizing the investment contracts available to us, it looks like host countries blindly hope that LASLA could implement the propagated wealth improvements. Instead, they have to realize that they are offering the attractive input factor land at a reasonably low price on the world market for agricultural land and that they can easily ask for something in return.

We further investigated whether international law can either fill such national gaps of fairness or create obligations for host or home states to incentivize national institutions and agents to solve the problem. International law as a potential jurisdiction to solve future conflicts arising from the issue of land investments is still underdeveloped. Even when international law has different mechanisms to solve conflicts in both investment and human right areas, it would be unrealistic to affirm that these jurisdictions could turn the tendencies in a way unison with the proposition made by Varian. However, this does not mean that it is impossible to realize. The problem is that since the jurisprudence is not consistent, the applicable judicial methodologies to solve the conflicts are highly subjective to the decision maker; in this case the judges. In addition to this subjective aspect, the fragmentation of international law in the last decades contributes to more judicial insecurity in investment jurisdiction. This holds exactly for those situations in which investors could be made responsible for human rights violations.

The predominantly poor smallholders in host states targeted by LASLA suffer from a

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combination of weak institutions and incomplete contracts, particularly lacking representation of their interests. It could well be the case that in states with better institutions, LASLA would produce desired outcomes. However, LASLA hardly contribute to an institutional improvement. Thus, under the actual judicial circumstances the possibilities of international law to correct this situation are still limited in practice.

Chapter 4

Behind the Scenes – What Determines Elections of Non-Permanent Members into the UNSC?*

Abstract

What criteria are likely to determine elections of non-permanent members to the United Nations Security Council? UNSC membership is highly attractive to both developing and developed countries. Candidates compete within the five country groups and elections are increasingly competitive. Applying generalized estimating equations (GEE) with a logistic link and cluster-robust standard errors, we investigate whether an average state is more likely to be elected to the UNSC as a non-permanent member. We concentrate on the more competitive elections of the groups of Western European and Others and the Group of Latin American Countries. To exclude cold war strategic voting, this article uses data from 1990-2009 and tests for variables representing state power and state conduct within and outside the UN system. For the groups tested, our results support the idea that "embeddedness" in the international community through diplomatic delegates and international organizations affects the chances to win a seat positively. We conclude that informal ties within the international community helps to achieve the desired membership.

Keywords International Organizations, Elections, Voting, Social Norms

JEL A12, C33, C87, D03, F50, K10, K33, F13, F53, F59

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4.1 Introduction

The United Nations Security Council (UNSC) can be regarded as the most powerful organ of the international community. The UNSC provides a forum in which national representatives can come together to define common ground through their decisions.¹ It gains further significance in times where problems can no longer be addressed on a national level only but require global solutions. Membership in this council is very attractive and desired. Thus, the competition for non-permanent seats is increasing: While candidatures were more likely to be the outcome of diplomatic arrangements in the past (Malone 2000), today more states vie for the limited number of available seats. For example, in the election on October 13, 2011, Azerbaijan, Hungary, and Slovenia all indicated that they would run for the single available seat for the Eastern European countries, Mauritania and Morocco announced to pursue the single African seat, while Japan and Pakistan intended to run for the single Asian seat to be filled that year (United Nations 2009).² But what drives the election outcomes, i.e. which states do the countries of the United Nations General Assembly choose for non-permanent members? In this article, we aim to enrich the understanding of which criteria of state behavior might have an impact. In the literature, Malone (2000) represents the most recently published analysis.³ His insightful case analysis illustrates countries' competitive and effortful "quest for nonpermanent seats." States are complex entities and assuming that these act consistently or rationally is not straightforward. We here build on the theory of neorealism or structural realism of Waltz (1979) and more recently Mearsheimer (1994). Both approaches assume states to be rational agents who are able to identify and rationally pursue their interests which is a function of their stable and exogenous preferences.

Although no empirical analysis has yet been published on this subject, there are two differing and profound empirical studies by Dreher and Vreeland (2010) and Iwanami (2010) on the academic market as working papers. Covering the five regions and the long time period from 1946-2007, Dreher and Vreeland (2010) find the selection process to be idiosyncratic.⁴ The investigation by Iwanami (2010) not only looks at the elections

 $^{^{1}}$ As a rather recent example, the council has recently shown "remarkable unity" with regards to "condemning and isolating the Libyan regime" (The Economist 2011b). Such unity signals a consensus of values to the international public.

 $^{^{2}}$ Even though a country group has more than one seat, not all of these seats might be filled in a given year, see footnote 10 for the exact distribution.

 $^{^{3}}$ Of course, other approaches exist to the broader nexus of the UNSC political economy. For example, Eldar (2008) scrutinizes the issue of vote trading in international institutions, including the UNSC.

⁴ "There is evidence that some regions practice norms of rotating seats, of selecting countries committed to peace, and of preferencing [sic] large countries. But there is no single factor that predicts UNSC-selection for all regions across both the Cold War and the Post Cold War periods. Because Se-

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but also starts one step earlier with the process of nominating the candidates based on two new data sets hand-coded by the author (1946-2008). She highlights the importance of ideology and norms. First, she finds evidence for a strong influence of groups on their candidates, i.e. candidates representing the region's interest are more likely to be nominated. Second, however, aggregating over all candidates, she observes that countries whose policy preferences are closer to those of the US will rather win the election. Iwanami interprets that the "electoral system works advantageously to pro-U.S. member states." Moreover, her findings emphasize the importance of norms in that "countries with a reputation for free-riding or transgressing international security norms are less likely to be elected" (Iwanami 2010: 1).

We are convinced by the findings of the above papers and want to further contribute to the discourse. However, we follow Malone (2000) in the assumption that elections are in principle competitive.⁵ Thus, we exclude the cold war period to avoid distorted voting.⁶ In light of the fundamental political change that many countries experienced over the last 60 years, it is sensible to concentrate on a shorter time span. However, this leaves us with the problem of fewer observations as we will discuss below regarding the descriptive statistics.

We shall not forget to mention that, obviously, behind-the-scenes agreements persist in politics on the world level where direct democratic legitimation is absent and candidate procedures remain non-transparent. Still, both national and international attention concentrates on council members and membership candidates. This gives support to the assumption that *reputational* concerns might play a role for candidate states.

Given a competitive election process, those states with a better reputation should be preferred throughout the election. This argument is supported by O'Shaughnessy and O'Shaughnessy (2000) who claim that nations have reputation capital. Nations could be viewed as brands such as GM, Sony, or Apple. In this respect, nations try to protect a certain image or set of values. This scenario is as well applicable to the election of non permanent members to the UNSC. In this setting, appealing to a feeling of solidarity with other states might help in increasing chances of winning a seat. Therefore, especially the variables of voluntary and mandatory contributions to financing the UN might signal solidarity with others. Signaling can significantly influence purchasing and in that

curity Council participation is consequential – members receive increased foreign aid, for example – the idiosyncratic selection process implies that UNSC membership may be an instrument that scholars can use as a measure of international political importance" (Dreher and Vreeland 2010: 1).

 $^{^{5}}$ We will explain below that competitiveness varies depending on the respective *regional group*, within which states are nominated and compete for UNSC seats.

⁶Note, that Dreher and Vreeland (2010) run extra regressions only on the post cold war period.

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sense also voting decisions (Spence 1973). Alongside O'Shaughnessy and O'Shaughnessy (2000), three different approaches to reputation can be found in the academic debate on international relations: Goldsmith and Posner (1999, 2005) question the existence of reputation for states, claiming that most interactions between states can be explained by power relations. Downs and Jones (2002) argue for compartmentalized reputation that is sequential and case related, although spillover effects are possible. Finally, Guzman (2008) defends the existence of an overall reputation. Reputation remains a hardly quantifiable concept and conclusions from empirical measures must be drawn with caution. However, reputation as an informal organizing mechanism on the international stage is a very important and controversially discussed topic. We shall keep this reputation argument in mind when interpreting our results.

Our analysis is organized as follows: section 4.2 introduces the UNSC, outlining the attractiveness of non-permanent membership for both developing as well as developed countries. We introduce details on the voting procedures that do not provide clearcut guidelines on which states have to be elected. Rather, the members of the United Nations General Assembly (UNGA) choose on their own. As elections are competitive, we aim to derive a certain code of conduct for state behavior that favors winning the election. However, as the elections in Africa and Asia still follow a non-competitive rotating principle and we have too few observations for Eastern Europe, we focus our analysis on the the whole UN, the Group of Latin Latin American Countries (GRULAC), and the Western European and Others Group (WEOG). Second, we present our data and empirical analysis in section 4.3. Remarkably, we find that embeddedness in the international community through delegates and organizations, i.e. the informal ties with other countries, raise chances to win a UNSC seat. The last section (4.4) concludes and discusses our results.

4.2 United Nations Security Council

4.2.1 About the UNSC

Established after the second World War in 1946, the United Nations Security Council (UNSC) is the most powerful of the principal organs of the United Nations (UN). According to chapter V, art. 23-32, of the UN Charter, the UNSC is charged with the *maintenance of international peace and security*. Its powers are exercised through United Nations Security Council resolutions. They include the establishment of peacekeeping operations, the establishment of international sanctions, and the authorization of military action (see, chapter VII, in particular art. 41 and 43, UN Charter, United Nations

1945). The Security Council consists of fifteen members of the United Nations. Five members are permanent: China, France, Russia, the United Kingdom, and the United States of America. Ten non-permanent members are elected by the United Nations General Assembly (UNGA) by secret ballot. Note that the UNGA is one of the five principal organs of the United Nations and the *only one* in which all member nations have equal representation.

4.2.2 Attractiveness of non-permanent membership

UNSC membership is very attractive. Malone (2000) observes three reasons for intense jockeying for seats. First, UNSC seats provide international prestige. Since the UNSC "may decide on enforcement measures, economic sanctions (such as trade embargoes) or collective military action,"⁷ it can be understood as the most powerful organ of the UN. States that significantly contribute to the UN can more effectively influence the decisions on where to invest their assets as UNSC members (in order to avoid "taxation without representation"). On the contrary, a defeat in the election is likely to result in negative publicity for the state representatives at home. Countries with a strong interest in UN peacekeeping and security can better pursue these interests as UNSC members. Second, Malone highlights states' *positioning* in disputes before the council. According to article 27:3, UN charter, a state that is a "party to a dispute shall abstain from voting." In practice, however, the definition of *dispute* has been hotly debated. Moreover, council members can better influence council debates than nonmembers. Third, states may effectively pursue broader objectives. Although direct effects on the realization of states' objectives through council membership are hard to quantify, the council is definitely an attractive forum for a variety of topics. Bringing up certain issue areas or taking active part in council discussions might well affect their outcome. Malone mentiones Canada's pursuit of its human rights interest as an example (see Malone 2000, and also Malone 1997).

But to what extent is membership attractive to less powerful contries, especially for developing countries? O'Neill (1996) highlights the high voting power of permanent UNSC members. However, "power itself is not the goal" (O'Neill 1996: 219). Rather, the council provides prestige and access to information for all council members. Kuziemko and Werker (2006) and Dreher et al. (2009b,a, 2010) provide illuminating empirical findings on this question. Kuziemko and Werker (2006) Find that developing countries receive 59 percent more development aid from the US while inheriting a seat on the council.

⁷See the official UNSC site http://www.un.org/Docs/sc/unsc background.html., June 2, 2012.

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Further, regarding the International Monetary Fund (IMF), Dreher et al. (2009b) scrutinize for 197 countries using panel data over the period from 1951 to 2004: Not only participation in IMF programs increases through UNSC membership, it also reduces the number of conditions included in IMF programs. The authors conclude that "IMF loans seem to be a mechanism by which the major shareholders of the Fund can win favor with voting members of the Security Council" (Dreher et al. 2009b: 742). In a second article, Dreher et al. (2010) analyze the level of conditionality attached to (a maximum of) 314 IMF arrangements using panel data with 101 countries over the period from 1992 to 2008. They find that council members receive about 30 percent fewer conditions attached to the loans that they receive from the IMF. The authors conclude "that conditionality is softer for these countries because the major shareholders of the IMF desire influence over the Security Council" (Dreher et al. 2010: 1). Second, with respect to the World Bank Dreher et al. (2009a) investigate panel data for 157 countries over the period 1970-2004: Council membership increases the number of World Bank projects a country receives, though it does not affect the size of World Bank loans. In addition to immaterial prestige, council membership apparently materializes in monetary benefits for less developed countries. Thus, membership in the UNSC pays off.⁸

Due to the high attractiveness of council membership, states have a strong interest to increase the possibility to be elected. This, in turn, means that members of the UNGA can reward certain states by giving them their vote. Since the election is held by secret ballot, we can assume some competition in the system. From that angle, states' reputation plays a key role in the election process.

However, it is important to highlight that UNSC elections cannot be compared with, say, national governmental elections. Member states place their candidature strategically. For example, Switzerland is a candidate for 2013/14 but decided in January 2011 to candidate for 2023/24, a period for which no other members contest so far (Swiss Federal Department of Foreign Affairs 2011). Moreover, general public and UNGA states' attention on candidate states is high, e.g., through official media. This pressure might discipline candidate states concerned about their reputation to behave according to a UN code of conduct.

⁸We shall not forget to mention that research by Bueno de Mesquita and Smith (2010) challenges these findings. The authors emphasize that even though governments of non-permanent members might benefit from easier access to money, these benefits might not pass on to the people in the respective countries in terms of welfare (see on this also Bueno de Mesquita and Smith 2013).

4.2.3 Elections of Non-Permanent Members

The United Nations General Assembly (UNGA) elects the non-permanent members who are nominated before within five UN Regional Groups. Table 4.1 shows an overview of the five groups, the number of states in the groups, the number of permanent seats, as well as the number of non-permanent seats of each group.⁹

				Seats
Group	Abbrev.	States	Permanent	Non-permanent
Western European and Others	WEOG	28	3	2
Latin American Countries	GRULAC	33	0	2
African	AFG	54	0	3
Asian	ASG	53	1	2
Eastern European	EEG	23	1	1

Table 4.1: UN Regional Groups and Number of UNSC-Seats

Every year, the UNGA elects five non-permanent members for two year terms.¹⁰ Direct re-election of a non-permanent member is not possible. Following the UNGA's rules of procedure, all UNGA members have equal weight of vote and candidates need a 2/3 majority of the present members in order to win a seat. Indeed, particularly rules 83 and 93 call for an unlimited number of voting rounds until one candidate obtains the necessary majority (United Nations 2008: 23, 26). This led, for example, to the remarkable deadlock between Cuba and Colombia in 1979: after no winner was elected in 154 rounds of voting lasting over three months, both withdrew and compromise candidate Mexico was elected in round 155 (United Nations Security Council 2011).

The official criteria for the non-permanent membership are, according to art. 23, UN Charter, "in the first instance to the contribution of members of the United Nations to the maintenance of international peace and security and to the other purposes of the Organization, and also to equitable geographical distribution" (United Nations 1945).

Although no Charter-specified qualifications for membership exist, the UN states lists factors that are informally taken into account by member states when choosing their candidates: positive factors are troop contributions to UN peacekeeping operations, peacekeeping experience and record; representation of a significant demographic group; experience in international leadership; and financial contributions to the UN budget (United

 $^{^{9}}$ Since January 1966, the UNSC has ten non-permanent members. From 1946-1964, it consisted of only 11 members, six of which were non-permanent.

¹⁰ To be more precise, in every *uneven* year the AFG countries compete for two seats while the ASG, the EEG, and the GRULAC countries compete for one seat each. In every *even* year, the WEOG countries compete for two seats while the AFG, the ASG, and the GRULAC countries compete for one seat each.

Nations Security Council 2006, UNelections Campaign 2012).

Through unobservable diplomatic negotiations some countries might pace their way into the council more than others. Moreover, the council represents itself diplomatic relations. Within their groups, members pay attention that countries have their turn. Such less transparent rotating systems prevail especially in Africa and Asia. These less competitive electoral systems complicate our empirical analysis in that sometimes candidates might win an election simply because they are next in line. However, elections within Eastern Europe, the GRULAC, and even more so within the WEOG are more competitive (Malone 2000, UNelections Campaign 2012). Unfortunately, we have too few observations for the Eastern Europe group for the time of our analysis. Thus, we have to concentrate our analysis on the GRULAC and the WEOG, introduced by a general analysis of the whole UN.

4.3 Econometric Setting

4.3.1 Data

We test for a variety of variables which can be broadly separated in three fields: A country's power, its activity within the UN system, and outside of the UN system. Table 4.2 summarizes all variables below.

We include two variables to test for *state power*. First, we use GDP per capita at purchasing power parity as a general measure of (economic) power.¹¹ A higher GDP might affect the election probability in a positive way as wealthier countries are economically more active and less wealthy countries might desire to benefit from their wealth. Thus, the straightforward argument is that wealthier countries are able to place economic pressure on UNGA members to vote for them.¹² Second, we include population size in the population variable.¹³ We herewith control for the possibility that countries with greater

¹¹GDP per capita is a common measure for (economic) power. Based on purchasing power parity (PPP), our measure "PPPpcGDP" is the gross domestic product per capita converted to international dollars using purchasing power parity measured in million US\$. We obtain the data on GDP from which are statistical reports from World Bank data sets on http://data.worldbank.org/indicator/NY.GDP.PCAP.PP.CD, July 31, 2011.

¹² In light of the concerns about vote trading (cf. Eldar 2008, Dreher et al. 2009b), one might be inclined to argue that more powerful states achieve their ends also without a non-permanent seat: wealthier countries donate to less wealthy countries in exchange for votes. However, since our analysis focuses only on two groups within which rather powerful countries compete against each other and not with decidedly less wealthy countries, the vote trading might take place concurrently but does not work against the desire of candidate countries to win their seat. Moreover, wealthier countries' interests might differ and their influence on UNSC decisions is definitely more effective from a non-permanent seat.

¹³Population data, in units of 1,000, is taken from World Bank data sets on http://data.worldbank.org/indicator/SP.POP.TOTL, July 31, 2011.

populations would be elected more frequently than others to the council. Given that the UNSC is the most powerful organ to represent the UN system, a greater population might demand greater representation in this system.

We test for three variables directly related to state behavior *inside the UN system*. Understanding the UN system as an institutional forum in which states can show engagement for common UN interests, this engagement can well be rewarded by a non-permanent seat. First, the scale of assessment (SoA) represents the percentage of financial mandatory contributions to the UN. These contributions are determined in advance every third year. They are related to the country's wealth as they are a percentage of a country's GDP.¹⁴ Mandatory contributions are an important source of financing the UN. These assessments are related to the net contributions to the UN and therefore easily observable as the percentage of contributions is communicated to the General Assembly. On the one hand, major contributors to the UN might claim representation in the council in order to decide on how their contributions are spent (again to avoid "taxation without representation", Malone 2000). On the other hand, UNGA members might reward strong contributors with their vote. Mandatory contributions are measured in the percentage that the respective country contributes to the UN budget. Second, a country can forward its particular interests by elevating the voluntary contributions (ln VolCon) to the UN financing system.¹⁵ This voluntary commitment to the common cause can be seen as a signal of a nation's social behavior towards the whole UN. It emphasizes a nation's appreciation of the UN organs and can be read as a nation's "feeling" of solidarity towards other states. Following the theory of O'Shaughnessy and O'Shaughnessy (2000), nations

¹⁴During our period of observation the General Assembly slightly adjusted the "rules of procedure" to appoint the SoA. Those were lastly defined on December 24, 2012 in the UN resolution 67/665 for the years 2013-2016 and before on December 24, 2009 in the UN resolution 64/248 for the years 2010-2012, which are already not included in our dataset (see for the adjustments bullet point 5 on page 2 of the UN resolution 64/248). However, for our analysis it is sufficient to recall that the SoA are related to a country's economic wealth. Two side remarks on the SoA. First, Huefner (2006: 67-77), stresses that this mandatory percentage contribution starts with a fixed *minimum percentage*. Even though this percentage is low, the absolute amount is a high burden for poor developing or emerging countries. Second, Huefner criticizes the poor payment morale of the US. According to the Global Policy Forum, at which Huefner is a senior research fellow, "as of December 31, 2010, the US owed \$736 million (or 80% of all member states debt) to the UN Regular Budget" (Global Policy Forum 2012).

¹⁵ We gather the data from the following United Nations General Assembly statistical reports on the budgetary and financial situation of the organizations of the United Nations system (note that Huefner 2006: 15-26 critically discusses the quality of this data): The third report (1994): A/49/588, for the years 1991-1993; the fourth report (1996): A/51/505, for the years 1994-1995; the fifth report (1998): A/53/647, for the years 1996-1997; the sixth report (2000): A/55/525, for the years 1998-1999; the seventh report (2002): A/57/265, for the years 2000-2001; and the eleventh report (2010): A/65/187 for the years 2001-2009. Due to a high correlation between absolute voluntary contributions and mandatory contributions to the UN (p-value <0.05) we log the voluntary contributions to remedy the problem of multicollinearity.

can incorporate values and this affiliation with others signals their solidarity. Voluntary contributions are measured in units of US\$1,000. They are a strong signal of deliberate willingness to contribute to the UN system.

Finally, by increasing its personnel contributions to UN Security Council Missions per capita,¹⁶ a candidate state might also try to influence the UN by showing generosity to the UN. Contributions are measured in units of US\$1,000 and openly communicated in the UN. Using these variables, we test whether states are concerned about the image which is created in the exact same field where the election takes place. Again, UNGA members might reward such behavior.

Variables that are neither directly linked to the election nor represent state power are represented by *Outside UN* in table 4.2. Here, we test whether voting states are concerned about strengths and weaknesses in other political fields than power and/or UN related areas.

Testing for	Variable	Abbreviation
Power	GDP per capita, PPP (current international \$)	GDPpcPPP
	Population size	Pop
Inside UN	Mandatory Contributions (Scale of Assessment)	SoA
	Voluntary Contributions	\ln_{VolCon}
	UN Peacekeeping Contributions per capita	UN_PK
Outside UN	Trade Openness	TOpen
Embeddedness	Embassies	Embas
	International Organizations	Inter_Org
Control	Political Stability	PolStab
Further Controls	Political Globalization Variables (KOF)	
	Cultural Proximity	CP
	Economic Globalization	EG
	Social Globalization	SG

Table 4.2: List of Variables

First, international trade is of highest importance. It is the fundamental material interaction between states and since wealth diffuses through trade to remote parts of the world, we use the openness to trade variable as a mean to measure countries' willingness to cut down their trade barriers. The variable consists of exports plus imports as a percentage of GDP, is measured at current prices in US\$, obtained from the QOG dataset (Teorell et al. 2011).

In order to test for a state's more informal and social embeddedness in the world

¹⁶We were able to take the data from the Department of Peacekeeping Operations of the UN, from the KOF Index of Globalization (Dreher et al. 2008) thanks to the friendly support of professor Axel Dreher.

community, we utilize the index of political globalization which is part of the KOF Index of Globalization (Dreher et al. 2008). We test for the number of embassies in a country¹⁷ and the membership in international organizations as the absolute number of international inter-governmental organizations of which a particular state is a member.¹⁸ Whereas the previous measures control for more tangible quantitative qualities in interstate relations, these last variables examine the informal ties of a particular country with other countries and what importance it allocates to connections with the international community. While these soft ties might seem weak at first glance, they should not be underestimated. In order to cultivate good international relationships, personal contact in physical institutions might be very valuable as it not only strengthens individual contact but also commits states to cooperate on a personal level. Since Embas and Inter_Org are highly correlated and basically test for the same concept, we decided to include only the variable Inter Org in our regressions.

Our control variable in all models is political stability¹⁹ since politically unstable countries are rather unlikely to be awarded a politically influential and prestigious international position. In our robustness checks (see appendix), we furthermore include the following controls from the KOF-index: Cultural Proximity (CP), Economic Globalization (EG), and Social Globalization (SG). Including these controls from the KOF index, we can make sure that the the "embeddedness" effect we identify is related to the *political interactions* between countries. We provide summary statistics of all our variables in the appendix (tables 4.7 through 4.9).

4.3.2 Model Choice

We use the method of generalized estimating equations (GEE, see Liang and Zeger 1986) with a logistic link and cluster-robust standard errors.²⁰ We investigate whether an average state is more likely to get elected into the UNSC as a non-permanent member. Running a Hausman test as well as checking the panel summary statistics tells us to favor a random effects model. However, by correlating the dependent variable (poscan) over time, we find little variation. Therefore, a GEE model with clustered standard errors is appropriate (Cameron and Trivedi 2009). Further support to use this model

 $^{^{17}\}rm{This}$ number is in the KOF index taken from the Europa World Yearbook, see for details <code>http://www.europaworld.com/pub/.</code>

 $^{^{18}\,\}rm Here,$ the KOF index falls back on the CIA World Factbook, see for details https://www.cia.gov/library/publications/the-world-factbook/.

¹⁹ The index ranging from 0 to 1 originates from the World Bank, here obtained from the QOG dataset (Teorell et al. 2011).

 $^{^{20}\}operatorname{Standard}$ errors are clustered on the country level.

1990-2010	Can's	Win's	р
UN	185	100	.54
WEOG	32	20	.62
GRULAC	49	19	.38
EEG	15	9	.60
ASG	25	22	.88
AFG	33	30	.91

Behind the Scenes – What Determines Elections of Non-Permanent Members into the UNSC?

Table 4.3: Candidatures, Successful Candidatures, and Probability to Win

is that due to the incidental parameter problem (Chamberlain 1980) the estimators are not consistent. Thus, we do not include dummy variables for each country to control for country-specific effects (as do Dreher and Vreeland 2010).

We first run bitests on the probability of winning the election for each state for the different regional groups (see table 4.3). Restricting the binomial probability test to states that actually contest for a seat, we find that a detailed analysis is most sensual for those groups with a relatively low probability to win a candidature, i.e. that elections are more competitive. These are the Western European and Others Group (.62), the Group of Latin American Countries (.38) and the Eastern European Group (.6). On the other hand for the AFG and the ASG, we find an approximately 90 percent chance of winning the election when seriously contesting (i.e. receiving more than 3 votes).²¹ This comes along with Malone (2000) and the UN-website www.unsecuritycouncil.org, confirming that both Africa and Asia follow a rotating system allocating UNSC seats. Dividing the UN into two groups, one containing the WEOG, the GRULAC, and the EEG and the other containing the ASG and the AFG and running a Chi square test, we find a significant difference between the distributions of the groups. This further indicates that the competition within the first three groups is stiffer than in the last two. However, since the EEG has too few observations (15 candidatures, only nine elections) within our period of observation, we have to restrict our analysis to the WEOG and the GRULAC.

To avoid numerical instability we divide GDPpcPPP by 10⁷ and Population by 10⁴. Time since last membership might play a role when countries follow a rotating principle, i.e. the longer a country did not have a seat the more it is likely to win the election now. To control for this, we use a variable Time which is 0 when a country is UNSC member

²¹ As the elections are all documented in official UNSC documents, election winners are figured out easily. However, it is not always that simple to appoint candidate states, as these are not mentioned in the UNSC documents. Applying the criteria of having received more than 0 votes might mislead as sometimes errors occur in the elections or states of the General Assembly vote out of "protest" for a state that did not really run for a seat. Deciding for more than three votes as an indicator thus seems most appropriate.

or when it enters the UN. Time is 1 in the first year after its membership (increasing by year). Time2 is Time squared and Time3 is Time cubed. While Iwanami (2010) includes all time variables into her regression, we refrain from that since we find time Time2 and Time3 to be highly correlated. Nevertheless, we introduce all time variables in a robustness check. Furthermore, to test for possible reputation driven changes in behavior prior to elections, we generated variables stating the difference between the value the variable has in the lagged year (1, 2, or 3) and the value in the year of the election. These variables are labeled t1_[VAR], t2_[VAR], and t3_[VAR], where the number refers to the number of years we lagged the variable and [VAR] refers to the respective variable name, for example SoA. These variables indicate the change in, e.g., memberships in international organizations from one (two, or three) years previous to the election to the year of the election.

We use Inter_Org (the membership in international organizations) as a proxy for a state's embeddedness in the international community. We also use Embas (the number of embassies in foreign countries) to mimic this. However, we do not include both Inter_Org and Embas in the same regression, due to the high correlation of the two variables. Moreover, we do not include all time differences at once in light of their high correlation amongst each other. Further, since both Inter_Org and Embas are from the KOF Index, we check as to whether other variables such as the social globalization, economic globalization or cultural proximity from the KOF also have an impact on the probability of winning a seat.

Regarding our model selection criteria for the GEE model, we use the quasi-likelihood under the independence model criterion (QIC, see Pan 2001), Pan's modification (see also Cui 2007) to the Akaike Information Criterion (AIC, see Akaike 1973). Using this criterion of best fit, we choose the model that has the lowest QIC value.

Our analysis is twofold. First, we run regressions for the whole UN. Second, we run regressions for the regional groups of the WEOG and the GRULAC revealing diverging effects for most variables between the whole UN and the two regional groups but robust and significant results for the embeddedness into the international community for both the UN and the two regional groups. Furthermore, we run a series of robustness checks, using a random effects logistic regression for our panel data, a GLS regression, as well as pooled logit and OLS regressions. Our results are robust throughout all these checks.

Note, that the models we use for the regional groups slightly differ from the model for the whole UN. This is due to higher model fits regarding the QIC criterion and originates in regional distinctions.

4.3.3 Regression Results

The Whole UN

Interpreting the results for the whole UN is important to get a general understanding about what is going on behind the scenes of UNSC elections (see table 4.4).²² However, as elections take place within regional groups we have to be cautious: results might be biased by the not competitive elections of those regional groups we do not investigate in our detailed analysis.

We find a positive, significant, and robust effect for the log of voluntary contributions (ln_VolCon). For the whole UN, contributing voluntarily to the financing system and the sub-organs and organizations of the UN increases the likelihood of getting a seat on the council. In detail, a one percentage increase in giving voluntarily to the UN increases the likelihood of getting elected by 0.27%. However, we cannot observe an effect of increasing contributions in years prior to the respective election. This implies that constant benevolent behavior of states towards the organs of the UN has a positive effect and that this effect cannot be imitated by just recently altered payments.

In fact, despite the time differences not being significant, they also have negative signs. This contradicts the assumption that states may be able to gain reputation for being benevolent in the short run. Further, as can be seen in the robustness table for the UN, these effects persist over different models.

For SoA, we find significant positive and robust effects for models with Inter_Org (a one unit increase leads to a 0.1% increased likelihood of getting a seat). This result is somewhat puzzling in relation to GDPpcPPP. According to Huefner (2006), SoA depends on the wealth of a state. This is exactly represented by our GDPpcPPP variable representing the wealth of a state per inhabitant. However, we find a negative effect for GDPpcPPP. To interpret this we also look at the time difference results for SoA. These are positive and significant for up to two years before the election. Based on these results, we conclude that states might increase their visible mandatory payments to signal financial strength to the UN. However, we have to be cautious as these results might be driven by the states of the WEOG and not represent the actual voting behavior of the UNGA.

Trade Openness is also positive and significant for models with Inter_Org; it is robust for models including Embas. This implies that states that are more engaged in international trade are more likely to win a seat. Moreover, the effects are positive for changes

 $^{^{22}}$ Note that results are marginal effects after GEE regressions with logistic link and QIC specification. Thus, results cannot be interpreted directly. The coefficients (timed 100) highlight the probability increase of getting elected when the value of the variable increases by 1.

UN	Inter_Org (best fit)	Embas	T Diff 1	T Diff 2	T Diff 3
SoA	$\begin{array}{c} 0.0015862^{***} \\ (0.00065) \end{array}$	0.0005502 (0.00069)	$\begin{array}{c} 0.0011961^{**} \\ (0.00057) \end{array}$	$\begin{array}{c} 0.0011647^{*} \\ (0.00072) \end{array}$	0.0008574 (0.00075)
t1_SoA			$\begin{array}{c} 0.0131187^{**} \\ (0.00604) \end{array}$		
t2_SoA				0.0105049^{***} (0.00375)	
t3_SoA				· · · ·	-0.0005918 (0.00486)
\ln_VolCon	0.0027582^{*}	0.0042014^{***}	0.0040978^{***}	0.0031877^{*}	0.0037766^{**}
t1_ln_VolCon	(0.00162)	(0.0016)	(0.00143) -0.004154 (0.00412)	(0.00173)	(0.00172)
$t2_ln_VolCon$				-0.0000764 (0.00198)	
t3_ln_VolCon					-0.0014619 (0.00189)
UN_PK	-0.0006085 (0.00049)	-0.0003382 (0.00041)	-0.0005742 (0.00045)	-0.0006177 (0.00051)	-0.0005701 (0.00052)
$t1_UN_PK$	(0.00049)	(0.00041)	(0.00043) -0.0000179 (0.00075)	(0.00031)	(0.00032)
$t2_UN_PK$			· · · ·	-0.0003362 (0.0004)	
$t3_{UN_{PK}}$				(0.0004)	-0.0003283
Pop	-0.0001239	-0.0001977	-0.0000963	-0.0001268	(0.00042) -0.0001531
TOpen	$(0.00026) \\ 0.0001543^{**} \\ (0.00008)$	(0.00028) 0.0000917 (0.00007)	(0.00024) 0.0001712^{***} (0.00007)	(0.00026) 0.0001261 (0.00008)	(0.00026) 0.0001639^{*} (0.0001)
t1_TOpen	(0.00000)	(0.00001)	(0.0001946) (0.00038)	(0.00000)	(0.0001)
$t2_TOpen$			(0.00000)	0.0004066 (0.00027)	
$t3_{TOpen}$				(0.00021)	0.0001841
Inter_Org	0.0015758***		0.0014005***	0.0014838***	(0.00029) 0.0015803^{***}
t1_Inter_Org	(0.00051)		(0.0005) -0.0025649 (0.00172)	(0.00054)	(0.00057)
t2_Inter_Org			· · · ·	-0.0009054 (0.0015)	
t3_Inter_Org				(0.0010)	-0.0006062
Embas		0.0003422***			(0.00135)
PolStab	0.0062824	(0.00012) 0.0093283	0.0081452	0.009013	0.0091635
GDPpcPPP	(0.00619) -0.0010323	(0.0064) -0.000833	(0.00619) -0.0011955*	(0.00633) -0.0011557*	(0.00673) -0.0013224*
Time	(0.00065) 0.0031139^{*} (0.00184)	(0.00059) 0.0012346 (0.00181)	(0.00064) 0.0038169^{**} (0.00160)	(0.00068) 0.0035133^{**} (0.00185)	(0.00072) 0.0038221^{**} (0.00103)
QIC	(0.00184) 392.826	(0.00181) 390.666	(0.00169) 373.175	(0.00185) 378.216	(0.00193) 374.515
Wald Chi^2	86.98	76.6	119.24	106.43	67.66
Ν	1337	1336	1266	1252	1221

Cluster robust standard errors in parentheses; * p < 0.1, ** p < 0.05, *** p < 0.01

Table 4.4: Regression Results for the Whole UN

in trade openness in years prior to the election. However, they are not significant. We interpret these findings as that being more open to trade is an indication of being embedded within the international community. We conclude that engaging in trade with other countries strengthens the linkages between nations.

These results are supported by the positive and highly significant effects of Inter_Org and Embas. Regardless of time differences or changes in variables (see robustness checks in the appendix) both are positive. Implying that the amount of Inter_Orgs or Embas significantly increases the chances to win a seat. However, the impact of an additional embassy (0.4%) and an additional membership in international organizations (0.15%) on election outcome is relatively small.²³

We conclude that states may influence the election beforehand, not only by campaigning within the UN but also through ambassadors in other countries and within other international organizations. However, it is not possible to build up short term relationships. The increase in Inter_Org does not show a significant effect up to only three years previous to an election. We conclude that states can build trustworthy relationships but that this takes time.

For Time, we find similar results as Iwanami (2010, see above). Although, we only include the adjusted values for Time. Time is here divided by 10 to avoid numerical instability. We do not, however, include the variables for Time squared and Time cubed since these are highly correlated. Running regressions with the squared and cubed time variables, we receive identical results as Iwanami (2010). However, due to above mentioned reasons we do not present the model here. Time has a positive significant effect on the outcome of an election. The more time has passed between the last time on the council or the longer a state has been member but not yet a seat on the council affects the election positively. This effect is robust over different analytical methods.

Western European and Others Group

For the WEOG as well as for the whole UN, we present several models in this section. Further robustness checks, applying different methods to show the robustness of the results, are presented in the appendix. We find that some of the results for the UN also hold for the WEOG.

Inter_Org and Embas are positive and highly significant. The WEOG countries can influence the election by other means than contributing to the UN system as required by the UN Charter. Increasing the number of Inter_Orgs and Embas before the election

²³Note, robustness checks for the variable Embas with time_ diff and other models assert the same effects. Therefore, we only report robustness checks for Inter_Org.

WEOG	Best Fit	Inter_Org	Embas	T Diff 1	T Diff 2	T Diff 3
SoA	$\begin{array}{c} 0.0148457^{***} \\ (-0.00452) \\ 0.0180211 \end{array}$	$\begin{array}{c} 0.0158156^{***} \\ (0.0051) \end{array}$	$\begin{array}{c} 0.0092445 \\ (0.00683) \end{array}$	0.0110239^{**} (0.00476) 0.0256166	$\begin{array}{c} 0.0159288^{***} \\ (0.00493) \end{array}$	$\begin{array}{c} 0.0127547^{***} \\ (0.00429) \end{array}$
t1_SoA	-0.0180311 (-0.05336)			-0.0256166 (0.04491)		
t2_SoA					-0.0076281 (0.02605)	
t3_SoA						-0.0106656 (0.01189)
ln_VolCon	0.0038316 (0.00421)	0.0043588 (0.00537)	0.0077997 (0.00872)	0.0095602 (0.00672)	0.0035912 (0.00523)	0.0043227 (0.00686)
t1_ln_VolCon	(0.00421)	(0.00337)	(0.00812)	(0.00072) - 0.0258153^{**} (0.01335)	(0.00323)	(0.00080)
t2_ln_VolCon					-0.0019226 (0.01051)	
t3_ln_VolCon						-0.0093776 (0.01002)
UN_PK		0.0018002 (0.00239)	0.0017473 (0.00265)	0.0016493 (0.00112)	0.0014168 (0.00268)	0.0009765 (0.00215)
t1_UN_PK		()	()	0.0011106 (0.00173)	()	()
t2_UN_PK				(0100110)	-0.0018664 (0.00227)	
t3_UN_PK					(0.00221)	-0.001753 (0.00169)
Pop	-0.0146215***	-0.0149498***	-0.0103612	-0.0103389*	-0.0147142***	-0.0113067**
TOpen	(0.00582) 0.0002222 (0.00019)	(0.00614) 0.0002297 (0.00019)	(0.00723) -0.0000469 (0.00028)	(0.00571) 0.000228^{*} (0.00013)	(0.00621) 0.0002533 (0.00017)	(0.00521) 0.000184 (0.00017)
t1_TOpen	0.0005382 (0.00226)	, , , , , , , , , , , , , , , , , , ,		0.0004974 (0.00134)	· · · ·	· · ·
t2_TOpen	()			· · · ·	-0.000071 (0.00103)	
t3_TOpen					(0.00100)	0.0009754 (0.00109)
Inter_Org	0.0041004***	0.0041654***		0.0028156**	0.0040383***	0.0035035***
t1_Inter_Org	(0.00111) -0.0026721 (0.00507)	(0.00141)		(0.00148) -0.000944 (0.00382)	(0.00138)	(0.00144)
t2_Inter_Org	. ,			. ,	0.0001702 (0.0047)	
t3_Inter_Org					()	-0.0028813 (0.00237)
Embas			0.0005371^{*} (0.00033)			(0.00201)
PolStab	0.0078858	0.0041436	0.0273337	0.006935	-0.0001454	0.0045991
GDPpcPPP	(0.01924) -0.0038933***	(0.01909) -0.0038277***	(0.02493) -0.0030638*	(0.01439) -0.0035194***	(0.01956) -0.0037297 ***	(0.01479) -0.0036912**
Time	(0.0013) 0.0136092^{***}	(0.00123) 0.0163418^{***}	(0.00172) 0.0072394	(0.00136) 0.0164188^{***}	(0.00134) 0.0144804^{**}	(0.0012) 0.0161844^{**}
QIC	(0.00485)	(0.00642)	(0.00977)	(0.00434)	(0.00676)	(0.00584)
Wald Chi ²	$502.003 \\ 36.99$	$558.875 \\ 31.08$	449.153 22.63	$627.836 \\ 63.85$	$532.178 \\ 53.54$	$558.852 \\ 28.96$
N N	193	194	$\frac{22.05}{194}$	193	192	28.90 185

Cluster robust standard errors in parentheses; * p < 0.1, ** p < 0.05, *** p < 0.01

Table 4.5: Regression Results for the WEOG

does not have an impact. We therefore conclude that trying to increase the reputation by an increase in Inter_Org, mandatory payments or ln_VolCon is not successful in the short run. Moreover, while ln_VolCon is not significant, SoA shows a positive and robust effect. In detail, we find that a 1% increase in mandatory contributions to the whole UN increases the likelihood of winning a seat by 1.4%. Thus, raising the share of the financial burden compared to other countries and likewise reducing other nations' burden towards the UN by 1% pays off in contesting for a seat.

The results mirror those of the UN. GDP is likewise significant and negative. This reflects the impression that not the most (financially) powerful states are elected but those who most engage within the UN financing and other Inter_Orgs. As above, we find time to be again significant. We decided to present here the best fit model for the WEOG with Inter_Org. For Embas we get similar results.

Group of Latin American Countries

While the results for the WEOG align with those for the whole UN, we find different results for the GRULAC. The best fit model for the GRULAC is the one with the t2 time difference. That is to say that Latin American states can increase the likelihood of winning a seat by increasing visible mandatory payments two years before the election.

This result is surprising and we cannot perfectly explain why we find an effect for two but not three years in advance. Mandatory payments are assessed every third year and the GRULAC candidates are elected every year. As emerging Latin American Countries are not as developed as those of the WEOG, increasing mandatory payments two years rather than one year before the election might signal higher commitment to the UN system.

We find the same robust and small (0.2%) effects for Inter_Org, although they are not significant for all models. However, the coefficients are fairly robust and do not change in value.

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	UNSC?		

GRULAC	Best Fit	Inter_Org	Embas	T Diff 1	T Diff 2	T Diff 3
SoA	-0.0146984 (0.01939)	-0.0013045 (0.0142)	-0.0140886 (0.01845)	-0.0131334 (0.01425)	-0.0064964 (0.01328)	-0.018187 (0.01367)
t1_SoA	(0.01939) 0.0684568 (0.06543)	(0.0142)	(0.01843)	(0.01423) 0.0842349 (0.05881)	(0.01328)	(0.01307)
t2SoA	· /			· · · ·	0.0289361^{*} (0.01779)	
t3_SoA					()	0.05546 (0.03953)
\ln_{VolCon}	0.0024444 (0.00448)	0.0017719 (0.00454)	0.0003438 (0.0046)	0.0029893 (0.00442)	0.00247 (0.00459)	0.0033863 (0.00447)
TOpen	-0.0000451 (0.00025)	-0.0000672 (0.00028)	0.000069 (0.00033)	-0.000137 (0.00024)	-0.0000971 (0.00026)	-0.0001437 (0.00024)
Inter_Org	0.0024029^{*} (0.00139)	0.0018458^{**} (0.00088)	· · · ·	0.0016652^{*} (0.00103)	0.0017826^{**} (0.00092)	0.0015765 (0.00103)
t1_Inter_Org	-0.0050046 (0.00364)	· · · ·		· /	,	× /
Embas	, ,		0.0011817 (0.00079)			
PolStab	0.0098666 (0.01824)	0.0133431 (0.02086)	0.0135017 (0.01807)	$\begin{array}{c} 0.0122504 \\ (0.0191) \end{array}$	0.0131831 (0.0202)	0.0116624 (0.01847)
GDPpcPPP	-0.0009642 (0.00148)	-0.0011236 (0.00153)	-0.0010751 (0.00144)	-0.0010149 (0.0015)	-0.0010824 (0.00152)	-0.0008285 (0.00137)
Time	-0.0014483 (0.00322)	-0.0042813 (0.00383)	-0.0016743 (0.00441)	-0.0039741 (0.00358)	(0.0043312) (0.00379)	-0.0042056 (0.00365)
QIC	454.691	420.346	545.945	448.56	421.38	464.602
Wald Chi^2	37.02	24.32	22.23	28.08	34.26	39.82
N	239	239	239	239	239	239

Cluster robust standard errors in parentheses; * p < 0.1, ** p < 0.05, *** p < 0.01

Table 4.6: Regression Results for the GRULAC

4.4 Concluding Remarks and Discussion

Before we conclude, we have to highlight the limitations of our analysis. International relations are highly complex and in-transparent. We cannot guarantee that unmeasurable diplomatic agreements influence the election outcome. However, exactly these behindthe-scenes arrangements support our findings in that such arrangements can best be tailored through informal, soft ties within and between international organizations and diplomats.

In our article, we investigate whether a variety of variables correlates with the chances to win non-permanent seat in the UNSC. We examine the post cold war period (1990-2009) to exclude strategic voting. Our most notable finding is that "embeddedness" in the international community through embassies and international organizations significantly raises chances to win. This holds for the UN in general but also for the Group of Latin American Countries (GRULAC) and the Western European and Others Group (WEOG), the two groups with more competitive elections we especially focus on.

We start with an analysis for the whole UN. Here, we cannot support the argument that

economically powerful countries with a large population are more likely to win. Rather, we find positive effects for increasing both mandatory and voluntary contributions to the UN system. Note, that short term increases cannot substitute long term commitment of contributions. Furthermore, we find that time has an effect in that countries which are not in the Council for a longer time are more likely to win a seat.

However, we have to be cautions in generalizing the findings for the UN for the individual country groups. For our chosen period, we find that the elections for Africa and Asia are hardly competitive as candidates win a seat with a probability of 90 per cent. Thus, the findings for the UN might be biased by these two groups. To understand who wins a seat in these groups, investigating the candidacy process is crucial (see Iwanami 2010). Elections are more competitive in Eastern Europe, Latin America and Western Europe. Due to too few observations for Eastern Europe, we focus our analysis on the GRULAC and the WEOG. Our regression results confirm our key finding is that "embeddedness" is significant for both the GRULAC and the WEOG. However, while countries of the WEOG cannot increase their chances through short-term increases in financial contributions, this seems possible for the GRULAC.

Referring to the question which countries are *chosen* by the member states of the UNGA, we can try to shed light on the question whether reputational effects play a role throughout the elections. Here, we cannot support the hypothesis that *power* dominates the election to the council. With our *inside-UN*-variables, we tested for behavior directly in the sphere of the UN. Here, the most direct variables that communicate good will to the UN, supporting the organization through voluntary contributions, did reveal significant effects. Most notably, however, we found the strongest positive effects in our *outside-UN*-variables of the KOF index, i.e. through the embeddedness in the international community via embassies in other countries and international organizations.

Our findings are not only valuable to states that consider running for a seat in the future and hesitate about their focus. Probably even more important, the public can convey a better idea of how the in-transparent elections into the UNSC actually proceed.

Two approaches are possible to evaluate the results. On the one hand, embeddedness is a financial and organizational *effort*. Thus, signaling self-integration in – and obedience to – an international code of conduct that emerges democratically is a commitment to the community. On the other hand, however, embeddedness is networking and obeying the rules that were *set* – potentially by the permanent members not even exposed to elections. This unpleasant interpretation is backed by Iwanami's (2010) findings that the nomination process is determined by ideology. We cannot conclude for

a definite answer. While realists and political economy scholars will favor the second interpretation, the fact that the UNGA can de jure vote anonymously gives rise to the first.

Interpreting the results referring to state reputation, we tackle a concept that is very difficult to quantify. Reputation is entirely immaterial and despite the possible existence of a coherent social reality among states, reputation remains predominantly subjective. Still, our results support the theory of Guzman (2008) for an overall reputation as the significant effects include variables inside but also outside of the UN system, and we find no effects for our power variables. Consequently, we can support his idea that policy fields that are not directly related to an issue area are of vital importance insofar as they seem to play a crucial role in international relations. A good reputation in fields that concern all nation states through the mentioned embeddedness positively influences the outcome in other areas.

Appendix

The appendix provides summary statistics on our data and the robustness checks for the whole UN, the GRULAC, and the WEOG.

	Mean	SD	Min	Max	Ν
ln VolCon	7.654765	2.94416	0	14.87634	3218
t1 ln VolCon	.0506989	1.40348	-7.320196	6.994914	2896
t2 ln VolCon	.3037681	1.646962	-8.960382	8.269501	2696
t3 ln VolCon	.4243442	1.862825	-8.947937	7.934991	2509
SoA	.811782	2.952785	.001	25	4063
t2 SoA	0025	.2376447	-3	2.591999	3681
t3 SoA	0012877	.3357534	-3.193	4.923	3490
t1_SoA	0015364	.1602177	-2.844	2.331001	3872
TOpen	88.94785	51.85857	14.94	462.46	3845
t1_TOpen	1.739176	7.60562	-29.50998	49.22	3657
t2_TOpen	3.081571	11.10075	-58.6	56.84	3469
t3_TOpen	4.729486	13.15453	-54.24	79.62	3281
Inter_Org	51.93986	11.574	31	96	3602
t1_Inter_Org	.7235694	1.893837	-6	9	3398
t2_Inter_Org	1.486906	2.565941	-7	12	3214
t3 Inter Org	1.99418	3.046877	-7	21	3029
Embas	53.52376	38.50315	4	185	3952
t1_Embas	.6052376	3.052984	-32	25	3765
t2_Embas	1.238603	4.121846	-32	52	3580
t3_Embas	1.872939	5.022121	-32	54	3396
UN_PK	2.553579	9.099938	0	102.03	4034
PolStab	035875	.905794	-2.707937	1.576872	2000
Pop	4.867235	15.69613	.0222	131.7885	4220
GDPpcPPP	11.46551	12.44013	.2342648	84.48684	3800
SG	51.24728	22.3656	7.76507	94.95	3899
EG	60.58053	18.25104	15.31	98.9	3019
CP	37.64976	30.39491	1	97.24	4007
$Time_Elect$	17.61688	16.92323	0	62	5336
can	.0620757	.24141	0	1	4393
poscan	.0387973	.1932052	0	1	4393

Table 4.7: Summary Statistics for the Whole UN

	Mean	SD	Min	Max	Ν
ln_VolCon	10.65229	2.601882	1.098612	14.87634	544
t1_ln_VolCon	.07045	.9836378	-5.879601	5.841753	514
t2 ln VolCon	.1637883	1.158584	-8.960382	8.269501	485
$t3$ _ln_VolCon	.2671072	1.122566	-8.947937	3.683521	456
SoA	2.73	4.893628	.014	25	652
t2_SoA	0005687	.2744469	-3	.9075003	567
t3_SoA	0108412	.3700664	-3	.9075003	538
t1_SoA	.0085284	.1234455	-1.107	.5910001	596
TOpen	88.06924	53.47454	23.39	312.54	608
t1_TOpen	1.959052	5.809941	-19.14	29.70999	579
t2_TOpen	2.985024	9.163978	-32.75999	40.42999	550
t3_TOpen	4.302796	11.25199	-31.48	54.48999	521
Inter_Org	65.84834	11.81548	38	96	574
t1_Inter_Org	.6350711	2.322663	-6	9	539
t2_Inter_Org	.7677725	3.037559	-7	9	510
t3_Inter_Org	1.075829	3.378353	-7	14	481
Embas	87.81991	47.32638	10	185	638
t1 Embas	1.033175	3.963385	-32	20	609
t2 Embas	2.146919	4.609744	-32	21	580
t3_Embas	3.308057	5.299136	-32	22	551
UN_PK	2.135308	3.728197	0	19.99	605
PolStab	.7736844	.72116	-1.760872	1.575929	307
Pop	3.331521	5.932612	.027	30.158	632
GDPpcPPP	28.72252	11.63674	4.927461	84.48684	570
SG	80.73991	9.33653	46.92	94.95	616
EG	80.69393	9.511402	54.92	98.9	550
CP	77.25531	19.85344	33.96	95.58	638
Time_Elect	16.0237	19.10907	0	62	665
can	.07109	.2575863	0	1	665
poscan	.056872	.2321487	0	1	665

Table 4.8: Summary Statistics for the WEOG

	Mean	SD	Min	Max	Ν
ln VolCon	7.834784	2.740221	.6931472	13.12578	587
$t1_ln_VolCon$.0690385	1.595517	-4.100575	5.980054	526
$t2$ _ln_VolCon	.3943952	1.923821	-6.751101	5.187386	484
$t3$ _ln_VolCon	.5416972	2.188565	-6.057954	6.346363	446
SoA	.2192826	.4927052	.001	2.39	780
t2_SoA	.0017391	.1490444	8670001	.7970001	713
t3_SoA	.0095978	.187022	8670001	.9190001	679
t1_SoA	0035652	.1196673	8670001	.7970001	747
TOpen	83.33848	40.63736	14.94	206.63	713
t1_TOpen	1.707228	6.645533	-18.36	49.22	680
t2_TOpen	3.177228	9.637756	-23.01	51.71001	646
t3_TOpen	4.457446	11.95996	-33.43001	57.87	612
Inter_Org	48.97283	7.570746	37	71	677
t1_Inter_Org	.6521739	1.789067	-6	6	640
t2_Inter_Org	1.25	2.331186	-6	8	606
t3_Inter_Org	1.641304	2.605507	-6	9	572
Embas	38.3587	22.55998	8	103	747
t1_Embas	.0271739	1.687084	-5	10	714
$t2_Embas$.0380435	2.274513	-8	11	680
t3_Embas	.1032609	2.926269	-8	17	646
UN_PK	5.055924	17.39569	0	102.03	747
PolStab	1246931	.7068472	-2.086802	1.576872	357
Pop	2.235255	4.184756	.0222	19.012	780
GDPpcPPP	8.007359	6.141106	.973543	36.14919	707
SG	48.73228	8.387474	16.41	63.64536	745
EG	61.73203	10.12068	19.86	87.14	569
CP	35.69974	13.69788	1	48.76	745
$Time_Elect$	21.98913	19.63826	0	62	780
can	.1195652	.3253377	0	1	780
poscan	.0434783	.2044875	0	1	780

Table 4.9: Summary	Statistics	for the	GRULAC
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GEE Logit	GEE Logit	GEE Logit	GEE Logit	ranet KE Logit	Pooled Logit	KE GLS	CUU DOILE
0.0011961** (0.00057)	0.0010537 (0.00075)	0.0003459 (0.00049)	0.0005001 (0.00053)	0.001227 (0.00122)	0.001226 (0.00122)	0.0067514^{***} (0.0012985)	0.006751 (0.0062111)
0.0131187^{**}	0.0186786^{***}	0.0118359^{**}	0.0123019^{**}	0.013078	0.013077	0.0606975^{***}	0.060698
(0.00604) 0.0010978***	(0.00746)0.0073170**	(0.00511) 0.00393***	(0.00537)	(0.01428) 0.0040697**	(0.01427) 0 004069**	(0.0249587) 0.0045745**	(0.0585378) 0.0045745*
(0.00143)	(0.00156)	(0.00124)	(0.00124)	(0.00178)	(0.00178)	(0.0019683)	(0.0027584)
-0.004154	-0.0062353	-0.0032309	-0.0035732	-0.003945	-0.003945	-0.004067	-0.004067
(0.0005742	-0.000502	-0.000475	-0.0004794	-0.000575	-0.000575	-0.0006172^{*}	-0.0006172^{*}
(0.00045)	(0.00054)	(0.00042)	(0.00042)	(0.00063)	(0.00063)	(0.0003252)	(0.0003384)
-0.0000179	-0.0001309	-0.0001256	-0.0002239	-0.000020	-0.000020	-0.000203	-0.000203
-0.000063	-0.0001255	-0.0001775	-0.0000784	-0.000080	-0.000080	-0.000206	-0.000206
(0.00024)	(0.00032)	(0.00023)	(0.00023)	(0.00034)	(0.00034)	(0.0004025)	(0.0003007)
0.0001712***	0.00013^{*}	0.0001423^{**}	0.0001039	0.0001771^{**}	0.000177^{**}	0.0001974^{*}	0.000197
(0.00007) 0.0001946	(0.0008) 0.0002326	(0.00006) 0.0001688	(0.0000762 0.0001762	0.00008)	(0.0008) 0.000196	(0.0001147)	(0.0001553) 0.000173
(0.00038)	(0.00039)	(0.003)	(0.0003)	(0.00043)	(0.00043)	(0.0004711)	(0.0004486)
0.0014005^{***}	0.0012974^{**}	0.0015656^{***}	0.0014993^{***}	0.0014575^{***}	0.0014574^{***}	0.0018719^{***}	0.0018719^{**}
(0.0005)	(0.00061)	(0.00046)	(0.00049)	(0.00049)	(0.00049)	(0.0006853)	(0.0008384)
-0.0025649	-0.003437 (0.00223)	-0.0027208 (0.00159)	-0.002/148* // 00161)	-0.002009	-0.002009 (0.00176)	-0.004214 (0.003059)	-0.004214 (0.0030879)
0.0081452	0.0002208	0.0082867	0.0044587	0.008560	0.008559	0.0104397^{*}	0.0104397*
(0.00619)	(0.00731)	(0.00539)	(0.00514)	(0.00581)	(0.00581)	(0.0059393)	(0.0063511)
-0.0011955* (0.00064)				-0.012359*** (0.00048)	-0.0012357*** (0.00048)	-0.0011081** (0.0007378)	-0.0011081* (0.0006867)
(0.0038169^{**})	0.0018395	0.0017428	0.0017248	0.0047325^{**}	0.0047325^{**}	0.0050597^{*}	0.0050597**
(0.00169)	(0.00249)	(0.00181)	(0.00186)	(0.00219)	(0.00219)	(0.0026837)	(0.0025554)
	-0.00039)						
		-0.000656^{***}					
		(0.00023)					
			-0.0003366** (0.00018)				
1266		1333	1348	1266	1266	1266	
119.24	120.42	152.50	J.)GI	30.93- 167.508470	-110.841660	000026.662	
					40.390000		
					0.107600	0.210400	0.035600
					0.288000		
					670.T000-		1.86
373.175	352.997	366.969	372.082				

 Table 4.10: Robustness Checks for the whole UN (Marginal Effects)

Variables	GEE Logit	With EG	With SG	With Cultural Prox	Panel RE Logit	Pooled Logit	RE GLS	Pooled OLS
SoA	-0.0064964	0.0020663	-0.0015826	-0.0000496	-0.0063852	-0.0063837	0.0049555	0.0049555
t2 SoA	(0.01328) 0289361^{*}	(0.0229078)	(0.0021809)	0.0010383 (0.0010383	0.0290611	(0.0220632 0.0290632	(0.0748194)	(0.0748194)
I	(0.01779)	(0.0192)	(0.00842)	(0.00289)	(0.04106)	(0.02951)	(0.0763358)	(0.1106981)
\ln_VolCon	0.00247	0.0009984	0.002805	0.0002653	0.0024854	0.0024852	0.00159	0.00159
Ē	(0.00459)	(0.00559)	(0.00177)	(0.0004)	(0.00377)	(0.0052)	(0.0059125)	(0.007211)
TOpen	-0.0000971	-0.0001956	-0.0002433	-0.00004	-0.0000984	-0.0000984	-0.0001318	-0.0001318
InterOrg	(0.0017826^{**})	(200000) 0.001907*	0.0003663	(100000) 0.0000799	(0.0017809)	0.0017807	0.0037057	0.0037057
)	(0.00092)	(0.00103)	(0.00045)	(0.0002)	(0.00178)	(0.00136)	(0.0022033)	(0.0036249)
$\operatorname{PolStab}$	0.0131831	0.0151473	0.0011591	0.0009716	0.0131099	0.0131083	0.0241284	0.0241284
תתתתתה	(0.0202)	(0.02867)	(0.00811)	(0.00151)	(0.01506)	(0.02082)	(0.0266207)	(0.0289644)
чыграгы	-0.00152)	-0.00176	(10,000,0)	-0.0001042	-0.0010146	-0.001047	-0.0015561)	-0.0016945)
EG		0.00088						
Č		(0.00104)						
26			0.002197* (0.00118)					
CP				0.0005276 (0.0007)				
Time	-0.0043312	-0.0036671	-0.0027323	-0.0003862	-0.0042383	-0.0042376	-0.0050535	-0.0050535
τ	(0.00379)	(0.00472)	(0.00199)	(0.0003)	(0.00601)	(0.00359)	(0.0040028)	(0.003959)
Cons							-0.1140292 (0.0805293)	-0.1140292 (0.1359624)
N Weld Chi ²	239 34 96	203 51 74	239 18 37	239 51.60	239 8 36	239	239 32 50	239
	07.00	÷	0.00		-33.780	-33.780		
LR D1- D2						01100		
$ m Fseudo~ m K^2$						0.1109	0.267	0.04
AIC								
BIC F								98 0
QIC	421.380	421.996	1101.375	4583.119				0000
Cluston wohing	+ ctondond own	no in neuronthoc	÷ ∼ *:50	00/ % *** voo / % *				
Cluster robus	it standard erro	rs m parenunes	ses: $p < 0.1$,	Cluster robust standard errors in parentneses; $p < 0.1$, $p < 0.05$, $\cdots p < 0.01$	Т			
			/ 11. D.ch	Π_{c} blis 4-11. Π_{c} biristrinsson $\Omega_{biristric}$ for the Ω_{DIII} A Ω (Maminel Π_{cont}		Λ_{numin} 1 F. π_{n}	(-+-)	

Table 4.11: Robustness Checks for the GRULAC (Marginal Effects)

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Variable	GEE Logit	GEE Logit	GEE Logit	GEE Logit	Panel Logit	Pooled Logit	GLS RE	Pooled OLS
S_{0A} t1_ S_{0A}	$\begin{array}{c} 0.0148457^{***} \\ (0.00452) \\ -0.0180311 \\ \end{array}$	$\begin{array}{c} 0.0151355^{***} \\ (0.00448) \\ -0.0214436 \\ \end{array}$	0.0161568*** (0.00476) -0.0195177	0.0152582^{***} (0.00455) -0.0179602	0.0126032 (0.01207) -0.0421374	0.0126099* (0.00763) -0.0421462	0.0240518^{***} (0.0044026) -0.1119813	0.0240518* (0.0134529) -0.1119813
ln_VolCon	(0.05336) 0.0038316 (0.00421)	(0.05104) 0.0033342 (0.00407)	(0.05727) 0.0033188 (0.00414)	(0.05439) 0.0038722 (0.00435)	(0.0031558) (0.0031558) (0.005939)	(0.04806) 0.0031572 (0.00647)	(0.1604572) 0.0086471 (0.0065646)	(0.1636963) 0.0086471 (0.0103785)
Pop	-0.0146215^{***} (0.00582)	-0.0126336* (0.00691)	-0.016362^{***} (0.00662)	-0.0151046^{***} (0.00605)	-0.0107049 (0.01354)	-0.0107103 (0.0073)	-0.0230714^{***} (0.0056788)	-0.0230714^{**} (0.0101634)
TOpen	0.0002222 (0.00019)	0.0000552 (0.00032)	0.0002391 (0.0002)	0.0002204 (0.00019)	0.0003129 (0.00033)	0.000313 (0.00032)	0.0003314 (0.0003509)	0.0003314 (0.0004348)
$t1_TOpen$	0.0005382 (0.00226)	0.0004114 (0.00225)	0.000467 (0.00224)	0.0004891 (0.0022)	0.0006228 (0.00196)	0.0006228 (0.00179)	0.000492 (0.0026102)	0.000492 (0.0027049)
$\operatorname{Inter_Org}$	0.0041004^{***} (0.00111)	0.0038991^{***} (0.00112)	0.0043733^{***} (0.00108)	0.0042562^{***} (0.00121)	0.0047696^{***} (0.00197)	0.0047705^{***} (0.00176)	0.0074915^{***} (0.0020837)	0.0074915^{**} (0.0033289)
$t1_Inter_Org$	-0.0026721 (0.00507)	-0.0024549 (0.00465)	-0.002982 (0.00499)	-0.0027506 (0.00502)	-0.0006237 (0.00506)	-0.0006236 (0.0045)	-0.0002193 (0.0076747)	-0.0002193 (0.0076076)
$\operatorname{PolStab}$	0.0078858 (0.01924)	0.0062094 (0.01826)	0.0087084 (0.02176)	0.0076678 (0.01939)	0.0243189 (0.03762)	0.0243124 (0.02613)	0.0172471 (0.0190956)	0.0172471 (0.0190851)
$\mathrm{GDPpcPPP}$	-0.0038933***	-0.0041169^{***}	-0.0035171***	-0.0037778***	-0.0040334^{**}	-0.0040343***	-0.0059867***	-0.0059867***
Time	(0.0013) 0.0136092^{***}	(0.00127) 0.0160846^{***}	(0.00141) 0.0124839^{**}	(0.0012) 0.0135562^{***}	(0.00187) 0.0226719^{**}	(0.00172) 0.022677^{***}	(0.0018567) 0.0390698^{***}	(0.0025346) 0.0390698^{**}
EG	(0.00485)	(0.00533) 0.0014783 (0.0029)	(0.00566)	(0.00484)	(0.01009)	(0.00872)	(0.011815)	(0.0192646)
SG		(7700.0)	-0.0007077 (0.00196)					
CP				-0.0001329 (0.00072)				
N Wald Chi ² OIC	193 36.99 502 003	$\frac{193}{48.4}$	193 48.31 522 836	$\frac{193}{44.55}$	$\begin{array}{c} 193\\ 10.64 \end{array}$	$\begin{array}{c} 193\\ 22.76\end{array}$	$193 \\ 141.66$	193
LL AIC BIC					-37.85453	-37.854529 0.517 -876.838		
Pseudo R ² LR						$0.1579 \\ 14.196$		
${ m R}^2$							0.2494	$0.0717 \\ 0.94$
Cluster robust s	Cluster robust standard errors in		parentheses; * $p < 0.1,$ ** $p < 0.05,$ *** $p < 0.01$	5, *** $p < 0.01$				
		Table 4.12:	Robustness (Table 4.12: Robustness Checks for the WEOG (Marginal Effects)	WEOG (M	arginal Effects	3)	

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Eidesstattliche Versicherung

Hiermit erkläre ich, Johannes Schwarze, an Eides statt, dass ich die Dissertation mit dem Titel

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selbstständig und ohne fremde Hilfe verfasst habe.

Andere als die von mir angegebenen Quellen und Hilfsmittel habe ich nicht benutzt. Die den herangezogenen Werken wörtlich oder sinngemäß entnommenen Stellen sind als solche gekennzeichnet.