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# When Do Disarmament, Demobilisation and Reintegration Programmes Succeed?

*Lilli Banholzer*

# When do disarmament, demobilisation and reintegration programmes succeed?

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## Abbreviations

CDF	Civil Defence Force
CNDP	Congrès national pour la défense du peuple
CONADER	National Commission on Demobilisation, Disarmament and Reintegration
DDR	Demobilisation, Disarmament and Reintegration
DRC	Democratic Republic of the Congo
FRETILIN	Frente Revolucionária de Timor-Leste Independente
LRA	Lord's Resistance Army
MDRP	Multi-Country Demobilisation and Reintegration Programme
NGO	Non-governmental organisation
NRC	Norwegian Refugee Council
PTSD	Post-traumatic stress disorder
RENAMO	Resistência Nacional Moçambicana (Mozambican National Resistance)
RUF	Revolutionary United Front
SIDDR	Stockholm Initiative on DDR
UCDP	Uppsala Conflict Data Programme
UN	United Nations
UNICEF	United Nations Children's Fund
UNITA	União Nacional para a Independência Total de Angola ('National Union for the Complete Independence of Angola')
UNPK	United Nations Peacekeeping mission



## Executive summary

One of the problems in post-war societies is finding ways of convincing former combatants to hand in their weapons and reintegrate into civil society. In an attempt to facilitate the transition from war to peace, DDR (disarmament, demobilisation and reintegration) programmes have become key components of national and international efforts to pacify post-conflict societies. Assisting fighters to gain a foothold in civil society is thought to prevent them from returning to combat and hence to avoid a resumption of hostilities in the long run. In line with sustained investments in DDR programmes, as well as with a noteworthy increase in the number and scope of such programmes, a growing – albeit relatively small – body of literature is attempting to catch up with these developments. In an effort to gather what we know about the factors that contribute to the success of DDR programmes, this discussion paper provides a synthesis of the current literature. While emphasising the emerging body of quantitative research, it also draws on reports by practitioners and in-depth case studies in response to two critical questions:

1. How effective are DDR programmes?
2. What factors and circumstances contribute to or impede their success?

Analytically, this paper locates findings in the literature at three levels:

- the macro level, i.e. context-specific factors;
- the meso level, i.e. programme factors;
- the micro level, i.e. individual factors.

The following conclusions may be drawn from the literature. Firstly, *DDR cannot be taken out of context*. The success of a DDR programme depends not only on the programme itself, but also on a number of *context-specific factors* that can either facilitate or hamper the implementation of the programme.

- A certain *economic threshold* raises the chances of DDR being successful as it becomes easier to find alternative employment for former combatants.
- *Functioning government institutions* help to ensure that states can fulfil their commitments and provide the level of security needed for combatants to disarm.
- The *presence of institutionalised, peaceful conflict-solving mechanisms* helps prevent the rapid escalation of minor conflicts.
- DDR can help to improve the situation for individuals, but it is not meant to – and therefore cannot – improve overall economic or political contexts. A *wider recovery strategy* that *embeds DDR in a multi-dimensional peace-building framework* is therefore essential for success – also to avoid jealousy amongst the rest of the population.
- Of equal help is the presence of a *third party* on the ground. Even though an external force cannot force hostile parties to commit to DDR, it can *help to create a framework to solve the security dilemma*. *National ownership* is desirable but should *be promoted only if national capacity and know-how are strong enough*, otherwise delays and ill-functioning programmes may lead to severe frustration and endanger the parties’

overall commitment to DDR.

In terms of *programme design, timing is of the essence and programmes need to match the target groups and their needs.*

- DDR works best in *stabilising peace* – it is *not a good tool for peace enforcement* and as such should be launched *after the end of hostilities* and/or the signing of a peace agreement. DDR is less likely to work if implemented when fighting is still going on.
- While there is *no need to rush* into DDR right after signing a peace agreement, *do not wait too long* either, as combatants' commitment to peace could decline with time and frustrations may arise.
- The *eligibility criteria* should *not be overly restrictive*. In many cases, members of armed groups fall through the raster of eligibility criteria for DDR programmes and are left without assistance. Fighters who used to share arms, for example, are often overlooked by “*one weapon, one combatant*” types of programme.
- Similarly, *female* former members of armed groups *are often overlooked* and need to be given more attention.
- There must also be a focus on ensuring *that training and economic reintegration programmes match the needs of people* on the ground, and that skills training is *relevant to local markets*. Thus, programme design should always include a thorough labour market assessment.

*Look out for “high-risk” groups:* combatants are *not a homogenous group* and come with different characteristics and experiences which will lead them to struggle more or less with the DDR process.

- Most notably, the *age of recruitment* matters greatly. The younger the combatants are when they join or when they are forced to join the fighting and the longer they remain combatants, the less likely they will be able to reintegrate. It is therefore important to prevent the recruitment of young fighters at all costs. Their demobilisation can often start before the rest of the combatants are tackled.
- Combatants who have been *members of an armed group for many years* are less likely to participate in the DDR process.

DDR candidates should always be screened for *psychological problems*. Not every fighter suffers from severe post-traumatic stress, but those who do are much less likely to resume a normal life and – if untreated – will be prone to drug abuse, illicit activities and violence. As such, they pose a considerable threat to post-conflict stability.

## 1 Introduction

Combatants and former combatants can become a major source of destabilisation in post-war countries and increase the risk of hostilities being resumed if they decide not to go along with the peace process. Dashed expectations, dissatisfaction with their situation at the end of the war and difficulties in resettling into civilian life can be powerful triggers for combatants to take up their weapons again and resort to war. Schauer / Elbert (2010, 312) point out that *“the risk of re-recruitment is high when ex-combatants fail to reintegrate economically and socially into their civil host communities, which may cause substantial economic development issues, and a new turn in the cycle of violence becomes inevitable”*. The devastating war in Angola in 1993 and the genocide in Rwanda just one year later were both the sad results of soldiers refusing to go along with the peace process. The two conflicts cost the lives of more than a million people (Stedman / Rothchild / Cousens 2002).

The particular threat arising from former combatants comes from their high levels of organisation, their familiarity with fighting techniques and weaponry, and their willingness to use violence, and habit of using violence, as a mean of getting their way (Humphreys / Weinstein 2004, 39). The latter point in particular, i.e. their habituation to problem-solving by violent means, turns them into a primary peril to the peace process. Dzinesa (2008, 6) stresses that *“combatants subscribe to a mode of masculinity that is imbued with a sense of manly physical strength, personal invulnerability, and high levels of conquest desensitised to violence.”* The prevalence of such hyper-masculine behaviour can lead to different forms of violent and aggressive behaviour, raising the level of violence and insecurity in post-war settings and jeopardising peace efforts. Child soldiers in particular, who, unlike their adult colleagues, have never experienced anything other than a culture of violence and aggression, do not have a chance of internalising the non-violent conflict-solving mechanisms and behaviours that are required for life in peaceful settings (Maedl et al. 2010). When paired with dissatisfaction, the willingness and ability to use violence as a means of getting one’s way can be an explosive mixture. The United Nations’ Post-Conflict Stabilisation, Peace-Building and Recovery Frameworks (2006, 3) summarises why returning soldiers are a problem that needs to be addressed:

*“Ex-combatants, especially when they are young, may have become a ‘lost generation’, having been deprived of education, employment and training during the conflict period, suffering war trauma, becoming addicted to alcohol and drugs, and dependent on weapons and violence as the only means to make their way in the world. When they lose their military livelihood, they are likely to experience difficulties in adapting to civilian life. Male ex-combatants may engage in anti-social behaviour within their families and communities, contributing to an increase in economic and social – especially sexual – violence.”*

In response to the imminent threat that returning combatants pose to the peace process, the international community is turning increasingly to what are known as disarmament, demobilisation and reintegration (DDR) programmes. These are designed to facilitate combatants’ transition from professional fighters to civilians and to reduce their incentives to take up arms again.

Even though these programmes have flourished since the late 1980s, their track record is mixed and little is known about the factors that contribute to their success. Research has

only recently started to look at DDR programmes. In an effort to review what we do and do not know about the success and failure of DDR programmes, this discussion paper provides a synthesis of the literature produced to date in response to two critical questions:

1. How effective are DDR programmes?
2. What factors and circumstances contribute to or impede their success?

This paper unfolds in a series of steps. To pave the way for a synthesis of the literature, we start by discussing why and how combatants may jeopardise the peace process. We also paint a picture of the emergence of DDR programmes. The focus then shifts to a review of the literature on DDR, drawing on reports by practitioners, case studies, as well as studies on peace-building. The emphasis is on quantitative research. As will be demonstrated, the factors identified in the literature as contributing to the successful implementation of DDR are located at three different levels:

1. macro level, i.e. contextual, country-specific features such as economic stability or the existence of democratic institutions that not only impinge on the overall risk of a return to hostilities, but also affect the likelihood of a DDR programme being implemented in the first place;
2. meso level, i.e. features of specific DDR programmes, including but not limited to the types of aid offered or the actors involved;
3. micro level, i.e. individual characteristics and experiences that affect combatants' willingness and ability to surrender their weapons and reintegrate into civil society.

This paper offers a multi-dimensional perspective on DDR and the factors contributing to its success, adding a new holistic framework to the existing body of literature.

## **2 Why combatants struggle to reintegrate into civilian life**

As outlined by the United Nations (UN), there are many potential sources of discontent and frustration for ex-combatants. Economically, returning soldiers may struggle with a loss of income-generating activity following the dissolution of militant groups. The end of war implies the end of their careers and a decline in their income. Lacking education, experience and credentials for civilian jobs, former soldiers may encounter tremendous problems in finding alternative employment. Even in a stable and large economy like the US, large-scale studies of Vietnam veterans show that the absorption of former soldiers into the civilian labour market was initially slow and that many veterans had trouble finding new jobs. While some analyses claim that the US economy was eventually able to absorb the returning soldiers and that post-war salaries became comparable to those of non-veterans (Berger / Hirsch 1983), others point to a 15% long-term loss in earnings by white Vietnam veterans due to a loss of work experience (Angrist 1990).<sup>1</sup>

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1 Angrist (1990) and Costa and Kahn (2010) all found evidence of a general rise in lifetime earnings for black Vietnam veterans.

Even industrialised countries like the United States of America (US) struggle with the absorption of veterans into the civilian labour market. The situation in developing countries, however, with poorly performing and often war-damaged economies and where the population is already suffering from unemployment and poverty, is far more demanding. Being mostly uneducated, many veterans in developing countries face severe challenges in finding a new occupation. Particularly those veterans who joined or were forced to join an armed force at a very early age are unlikely to have received any kind of education apart from military training (Gear 2002). Specht (2000, 6) summarises the problem as follows: *“When rebels and soldiers are demobilised, they become job-seekers. They join the large group of unemployed youth in countries with a broken economy, due to the conflict.”* These unemployed ex-combatants are easy targets for existing or new rebel groups or criminal gangs.

In their search for new sources of income, former combatants run a high risk of resorting to violent or criminal activities. Many may consider joining rebel groups in other countries. Eastern European and South African ex-combatants, for example, are known to have become mercenaries in violent conflicts in Angola and the Congo, and to have contributed to their destabilisation (Alden 2002). In other cases and in the absence of opportunities in the legal job market, some war veterans turn to crime. This affects developed and developing nations alike. In Northern Ireland, Smyth (2010) observed a big shift from political violence to criminal behaviour. Equally, war veterans in Russia and the Balkans are known to have joined and expanded criminal networks (Alden 2002).

This problem is arguably more pronounced in the poorly performing legal economies of developing countries. Deprived of any future prospects, many ex-combatants regard illicit activities and criminal banditry as a last resort in their quest to make a living. As a result, crime rates in post-war countries often rise when combatants return from war (Knight / Özerdem 2004). In East Timor, the dismissal of one third of the defence force into a scattered economy, unable to absorb the new job-seekers, led to a series of armed clashes, an increase in gang violence and the eventual breakdown of law and order in 2006. This period is known as “the crisis” among the inhabitants of the youngest independent Asian Pacific country and is a vivid illustration of the dangers that lurk once hostilities have formally ceased (Peake 2008).

However, unrest among ex-fighters may also have other causes, such as the urge for justice and compensation. Having served in an army and defended either states or interest groups, former combatants may believe that their contribution should be officially recognised and financially rewarded (Rolston 2007). A failure to deliver what Schafer (1998) termed “compensatory justice” has led to discontent among ex-fighters in many countries.

Empirical evidence for this is found all over the globe. In El Salvador, ex-combatants occupied and threatened parliament in a protest against the non-distribution of promised payments, credits and land, all of which should have rewarded soldiers for their contributions to the country (Berdal 1996). In 1990, Zimbabwe was burdened with 25,000 unemployed war veterans, who, as members of the Zimbabwe National Liberation War Veterans Association, resorted to considerable force to achieve their political and economic aims (Dzinesa, 2008). In Bosnia-Herzegovina, former combatants set up roadblocks to force the government to hand out pensions and housing support, to which they believed they were

entitled (King 2000). In a detailed qualitative analysis of the demobilisation process in Namibia, Colletta et al. (1996, 209) described how unsatisfied former fighters threatened to “*turn Namibia into another Rwanda*” during their protests against the government’s lack of responsiveness to their demands.

In their seminal study on combatants in Sierra Leone, Humphreys and Weinstein (2007) looked at the relationship between justice and demobilisation and reintegration from another angle. After systematically interviewing over 1,000 ex-combatants, the authors found a significant negative correlation between soldiers’ belief that their party was worse off than the enemy party and their willingness to break ties with their militant faction. In other words, those who believed that the peace process was unfair were less willing to loosen their bonds with their former armed group, signalling a readiness to return to war if necessary.

The experience of combat and living in extreme deprivation and constant fear and stress does not leave former combatants unharmed. Former combatants are frequently known to suffer from mental health issues, which may turn out to be a major obstacle to their successful reintegration into civilian life. While psychological support and treatment are fairly widely available in industrial countries, ex-combatants in poor countries receive little help. Also, in comparison with studies of political and economic factors, researchers have largely neglected individual mental hazards and their influence on the peace process (Maedl et al. 2010, 178). This ignorance of mental health problems seems unjustifiable, considering what is known about their severity and impact. In a household survey conducted in Somaliland in 2002, seven years after the last civil war, Odenwald et al. (2005) found that 16% of former combatants were still incapable of performing an income-generating activity due to their severe psychological problems. A clinical observation study in Southern Sudan found evidence of increased aggression and a 15% higher suicide rate among former combatants as compared with non-combatants. The same study found a worrisome level of alcohol abuse, which was correlated to domestic violence among former combatants (Winkler 2010, 25). Schauer emphasised the consequences of mental health hazards: “*Some ex-combatants experience long-lasting symptoms that are correlated with unemployment, divorce, spousal and general violence, homelessness, criminal behaviour and substance abuse and addiction*” (World Bank 2006, 2).

### **3 The rise of disarmament, demobilisation and reintegration programmes**

The notion that the “lost generation” of former combatants pose a tremendous risk to countries caught in a “conflict trap”, as Glassmyer and Sambanis (2008) have termed the vicious cycle of renewed war, has aroused a great deal of attention in research and practice. Anxious to find peace-stabilising mechanisms, the international community has reacted to this apparent danger by implementing and supporting demobilisation, disarmament and reintegration (DDR) programmes. Designed and implemented not only by the UN, but also by a large number of other international organisations, national governments and NGOs, these programmes seek to mitigate the risk posed by ex-combatants, by assisting their disarmament and helping them reintegrate into civil society.

When do disarmament, demobilisation and reintegration programmes succeed?

It is not only in modern times that managing returning soldiers has been perceived as a big problem. War veterans in the ancient Roman Empire were regarded as a worrisome source of unrest, as many of them joined criminal groups after their release from the army. Offering their fighting skills to illegal groups was an option that many veterans chose because few could live on their savings and therefore saw no other way of making a living. Historic accounts suggest that the ancient Romans used crude forms of DDR assistance in response to this, such as the distribution of farmland to former soldiers or their re-recruitment into the army (Shaw 1984). Lamb (2008, 3) found evidence of DDR programmes at the beginning of the 20th century, following the end of the second Boer War in South Africa in 1902.

Large numbers of soldiers were also demobilised after the end of the two World Wars, but with quite different results. The hasty and disorganised demobilisation of German soldiers at the end of the First World War resulted in a failure to collect all their weapons (Bieber 2002). Many of these arms were later used in partisan struggles and hampered the establishment of a democratic order. Moreover, a failure to set up an organisation to help veterans with their transition to civil life caused great problems in their ability to adapt to the emerging democratic structures.

The US saw these failures as an incentive to improve demobilisation practices after the Second World War. US soldiers were demobilised in stages rather than all at once, to avoid a sudden influx of war veterans into the civilian population and labour market. Soldiers were also offered an opportunity to take their school or college exams before they were discharged. In contrast to the German experience in the First World War, there were fewer setbacks and problems with the demobilisation of US veterans.

Formal international programmes for the disarmament and reintegration of combatants emerged in the late 1980s and early 1990s. Their scope and size grew in line with the growing involvement of the international community in peace-building. In 1989, the United Nations Observer Group in Central America conducted a voluntary disarmament and demobilisation programme in Nicaragua. In the same year, 30,000 combatants from the South African forces and 13,000 combatants from the People's Liberation Army of Namibia were demobilised in Namibia (Kingma 1997, 3). Cambodia followed these efforts in 1992 with its own demobilisation programme (known as the United Nations Transitional Authority in Cambodia).

It was soon acknowledged that collecting and destroying arms was not enough to prevent former combatants from hampering the peace process. Rather, in order to lessen their interest in continuing to fight in the long term, former combatants had to be given new prospects for the future and an opportunity to start over again as integrated members of civil society. The United Nations was the first to focus not only on disarmament and demobilisation, but also on the resettlement and reintegration of former combatants in the course of its mission in the Democratic Republic of Congo (Dahl Thruelsen 2006, 8). From 2000 onwards, DDR projects started to broaden their scope from single-country to multi-country operations, taking account of the regional dimension inherent to many wars. Most notably, the Multi-Country Demobilisation and Reintegration Programme (MDRP), led by the World Bank, embraced seven countries in the Great Lakes region of Central Africa (Lamb 2008, 4).

This particular type of peace intervention is now broadening its scope at an incredible pace. According to the Human Security Report for 2009–10 (Human Security Report Project 2010), there has been a nine-fold increase in the number of DDR operations since the end of the Cold War, at a time when the number of international missions has “merely” tripled. DDR has evolved into an instrument on which the international community now relies strongly: not only did all of the past seven peace-keeping operations<sup>2</sup> mandated by the UN Security Council include a DDR programme, the UN also supported DDR missions in countries where there were no official UN peace-keeping operations. This was the case in Indonesia (Ache), Afghanistan, the Central African Republic, the Democratic Republic of the Congo, Niger, Somalia and Uganda (United Nations 2010).

Such efforts do not come without costs and the need to invest large resources. USD 1.599 billion was spent on DDR programmes in 2007, an average of USD 1,434 per demobilised combatant (Caramés / Sanz 2008). In the same year, nine out of the 19 countries undergoing DDR were among the lowest-ranking countries in terms of human development. The weighted average per capita cost of the 19 programmes effectively exceeded annual per capita income in these countries by a factor of three and a half (ibid.).

The number of actors involved in conceiving and executing such programmes has also risen substantially. Even though the UN has clearly assumed a leading role in the implementation of DDR programmes, a multitude of other international organisations, as well as international and local NGOs, are also closely involved. DDR efforts in Liberia, for example, are led by UNICEF but strongly supported by the World Food Program, the World Health Organisation, Action Aid and the United Nations Development Programme (Handson, 2007). The MDRP programme in the Great Lakes region of Central Africa is currently the largest programme in the world, with a budget of over USD 240 million. This multi-agency programme was launched in 2002 and aims to support 300,000 ex-combatants in seven countries, i.e. Angola, Burundi, the Central African Republic, the Democratic Republic of the Congo, Congo-Brazzaville, Rwanda and Uganda (World Bank, 2010). The programme is funded by the World Bank, 12 industrialised countries<sup>3</sup> and the European Commission, and embraces more than 30 partner organisations, including the UN. While the “DD” part, i.e. demobilisation and disarmament, generally remains the domain of governments or the UN, the reintegration aspect tends to be the common denominator for a plethora of NGO-sponsored development projects.

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2 United Nations Assistance Mission in Sierra Leone (UNAMSIL, 1999), Democratic Republic of Congo (MONUC, 1999), United Nations Mission in Liberia (UNMIL, 2003), United Nations Mission in Côte d’Ivoire (UNOCI, 2004), United Nations Stabilisation Mission in Haiti (MINUSTAH, 2004), United Nations Operation in Burundi (UNOB, 2004) and the United Nations Mission in the Sudan (UNMIS, 2005).

3 Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, the Netherlands, Norway, Sweden and the United Kingdom.

#### **4 Three letters, one goal: disarmament, demobilisation and reintegration in practice**

DDR may generally be regarded as a transitory tool, aimed at facilitating the conversion from war to peace by helping individuals give up their lives as combatants and revert to a civilian life. As Casas-Casas and Guzmán-Gómez (2010, 58) put it, “*DDR contributes to achieving a lasting peace process where those involved directly in the conflict can break with the past*”. The Final Report of the Stockholm Initiative on DDR, or SIDDR for short (2006, 25), regards DDR as creating a “*transitional safety net*” to ensure that combatants do not need to return to war in order to survive. In this regard, DDR can be located within the paradigm of peace-keeping and peace-building and is often actually embedded in broader peace operations. DDR also contributes to state-building because it involves a shift from the formal and informal rules of militant groups to the laws defined by the state (Casas-Casas / Guzmán-Gómez 2010, 58).

DDR programmes differ in location, duration, size and scope. Most, though not all, current DDR programmes are in operation in Africa. Several initiatives are also in progress in Asia, Europe and the Americas. The majority of programmes have a lifespan of one or two years, but some are of longer duration. Bosnia-Herzegovina’s DDR programme, which remained operational for 12 years, is an exceptional example. The average budget is roughly USD 102 million per project, ranging from as low as USD 1.7 million USD in the case of Niger to USD 565 million in the case of Sudan.<sup>4</sup> These figures should be treated with caution, however. Budgets tend to be adjusted as programmes proceed, and pledged resources are sometimes not disbursed in their entirety, in part to penalise non-compliance with donor requirements or programme mismanagement. With the possible exception of the highly detailed World Bank reports, little information is generally provided on the precise value of the resources allocated. The same is true of the number of demobilised combatants, as reliable records are often missing. It is clear, however, that the range is very wide: whereas around 4,000 combatants were targeted in Haiti and 5,000 in Northern Ireland, up to 370,000 soldiers were targeted by DDR activities in Bosnia-Herzegovina.

The settings in which DDR programmes are implemented differ from case to case. As a general rule of thumb, three questions are particularly relevant here:

1. What is the state of the conflict?
2. If it has ended, how has it ended?
3. Are international actors involved and, if so, in what way?

Some DDR programmes are launched while hostilities are still going on – and as such aim to have a pacifying effect. However, most programmes are implemented after the end of a war and are therefore thought to exert a stabilising effect. Conflicts that end with a peace agreement rather than victory by one side are more likely to be followed by a DDR programme. But there are also instances in which DDR programmes have been launched after the termination of war without a peace agreement, for example in the Central African Republic, where the victory of one side brought an end to hostilities.

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4 Based on our own estimates.

Even in cases where a peace agreement is signed, it does not necessarily contain references to DDR, let alone outline specific measures. According to the Uppsala Conflict Data Programme (UCDP) *Peace Agreement Dataset v. 1.0, 1989–2005* (Harbom / Högladh / Wallenstee 2006), DDR has been mentioned in only 63 of 148 peace agreements (43%) since the end of the Cold War. This of course means in turn that, in 85 cases (or 57%), the peace agreement did not contain DDR measures. While international peace missions are often on the ground when DDR is implemented, this is not always the case. In 14 out of 40 cases, DDR programmes were operated without any international peace mission. Table 1 outlines the contextual settings in which 40 DDR programmes have been implemented since 1989 and shows whether lasting peace followed the DDR intervention.

Although DDR programmes usually consist of three components, not all of them are implemented in all cases. Some programmes focus exclusively on disarmament and demobilisation, while others skip the “DD” part to directly address the issue of reintegration. Indonesia and Rwanda, for example, decided that reintegration support only was needed (Caramés / Sanz 2009, 10). While each programme is different, some standard procedures have emerged. These are outlined in the following sections.

#### 4.1 Disarmament

The process of *disarmament* is usually the initial step. It comprises the assembly of combatants, the collection and documentation of weapons, and the verification and certification of disarmed soldiers so as to assess their eligibility for further assistance and benefits (United Nations 2010). The short-term aim is to enhance security by reducing the number of weapons owned by individuals and to restore trust among warring parties. In the long term, the process is intended to prevent the circulation of small arms in particular and their proliferation to other countries through the black market. In many instances, the weapons collected are publicly incinerated as a testament to the end of the war and the destruction of its deadly tools. Knight and Özerdem (2004) emphasise the symbolic power of this stage of the process. A successful start to disarmament instils trust in the entire peace process and paves the way for the next stages. Inversely, delays and mismanagement can have destructive consequences. Armed groups may lose confidence in the peace process and their commitment to it may fade.

The disarmament of combatants may take the form of the unilateral disarmament of one group, the bilateral disarmament of two opposing groups or – in the most complex case – multiple disarmaments of a number of armed groups. Depending on the situation and, in the case of UN involvement, on the Chapter under which the UN mission is operating, the disarmament process may follow one of three approaches (Tanner 1996):

1. a consensual approach in which all conflicting parties agree to hand in their weapons;
2. a coercive approach in which one or more parties are forced to disarm;
3. a compelling approach based on a “carrots and sticks” philosophy.

When do disarmament, demobilisation and reintegration programmes succeed?

<b>Table 1: The context of DDR programmes in 1989-2010: conflict status, the way in which the conflict ended, the presence of an international peace mission, and whether DDR was followed by lasting peace</b>						
	Start of DDR	End of DDR	Status of conflict when DDR started	Way in which conflict ended	International peace mission?	DDR followed by lasting peace?
Afghanistan	2003	2005	Ongoing	---	Yes	No
Angola	1994	1996	Terminated	Peace agreement	No	Yes
Angola	2002	2009	Ongoing	Low activity	Yes	No
Bosnia-Herzegovina	1995	2007	Terminated	Peace agreement	Yes	Yes
Burundi	2004	2008	Ongoing	Peace agreement	Yes	No
Cambodia	1992	1993	Ongoing	Victory	Yes	Yes
Central African Republic	2004	2007	Terminated	Victory	Yes	No
Chad	2005	2010	Ongoing	Low activity	Yes	No
Colombia	2003	2006	Ongoing	---	No	No
Congo-Brazzaville	2008	2009	Terminated	Ceasefire	No	Yes
Democratic Republic of Congo	2004	2012	Ongoing	Peace agreement	Yes	No
El Salvador	1992	1993	Terminated	Peace agreement	Yes	Yes
Eritrea-Ethiopia I	1993	1997	Terminated	Peace agreement	No	Yes
Eritrea-Ethiopia II	2002	2008	Terminated	Peace agreement	Yes	Yes
Ethiopia-Eritrea I	1991	1994	Terminated	Victory	No	Yes
Ethiopia-Eritrea II	2000	2007	Terminated	Peace agreement	Yes	Yes
Guatemala	1996	1998	Terminated	Peace agreement	Yes	Yes
Guinea Bissau	2001	2005	Terminated	Victory	No	Yes
Haiti	1994	1996	Terminated	Victory	Yes	No
Indonesia (East Timor)	1999	2001	Terminated	Peace agreement	Yes	Yes
Indonesia (Aceh)	2005	2009	Terminated	Peace agreement	No	Yes
Ivory Coast	2005	2008	Terminated	Peace agreement	Yes	Yes

Liberia	2003	2008	Terminated	Peace agreement	No	Yes
Mali (Azawad)	1996	1997	Terminated	Low activity	No	No
Mozambique	1992	1994	Terminated	Peace agreement	Yes	Yes
Namibia	1989	1989	Terminated	Peace agreement	Yes	Yes
Nepal	2007	2012	Terminated	Peace agreement	No	Yes
Nicaragua	1989	1992	Ongoing	Ceasefire	Yes	Yes
Niger (Air and Azawad)	2006	2007	Terminated	Peace agreement	No	Yes
Philippines (Mindanao)	1997	2006	Ongoing	---	No	No
Rwanda I	1997	2001	Terminated	Peace agreement	No	No
Rwanda II	2001	2008	Ongoing	Low activity	No	No
Serbia	1999	2001	Terminated	Peace agreement	No	Yes
Sierra Leone	1998	2004	Ongoing	Peace agreement	Yes	Yes
Somalia	2003	2007	Terminated	---	No	No
Sudan	2005	2012	Ongoing	---	Yes	No
Tajikistan	1999	2003	Terminated	Victory	Yes	Yes
Uganda I	1992	1995	Ongoing	Low activity	Yes	No
Uganda II	2000	2008	Ongoing	Low activity	No	No
UK (Northern Ireland)	1998	2005	Terminated	Ceasefire	No	Yes
Total			26 (terminated) / 14 (ongoing)		23	
Source: Information on DDR: own data. Information on the way in which the conflict ended and data on lasting peace were taken from the Uppsala Conflict Data Programme (UCDP) Peace Agreement Dataset v. 1.0, 1989-2005 (Harbom / Högbladh / Wallenstee 2006) and the UCDP Conflict Termination dataset v.2010-1, 1946-2009.						

In practice, however, the boundaries between the different approaches are blurred. For example, disarmament could start with mutual agreement, but become more coercive as the parties' commitment fades.

Overall, though, few programmes are outright coercive in nature and operate under Chapter VII of the UN Charter. Most rely on disarmament by consensus or persuasion. In a number of missions, the UN convinced combatants to disarm by trading their weapons for goods, most notably in the weapons-for-cash programmes used in El Salvador, Haiti, Liberia, Mozambique, Nicaragua and Somalia (Tanner 1996; Knight / Özerdem 2004). Trading weapons for cash has raised concerns and met with criticism, however, as the cash might be used to acquire more modern weaponry. Later programmes have partly addressed this concern. In El Salvador, for instance, weapons were exchanged for vouchers (Laurance / Godnick 2001).

## 4.2 Demobilisation

*Demobilisation* is defined as the “*formal and controlled discharge of active combatants from armed forces [...]*” (United Nations 2010). The process usually starts with the opening of reception centres, which provide a first home for returning combatants. Demobilisation programmes continue by preparing former combatants for, and helping them with, their re-entry into civilian life. During the demobilisation stage, soldiers are usually cantoned in demobilisation sites or camps. Combatants are separated from their commanders and eventually transported back to their home towns or new living quarters (Handson 2007). Sometimes, certain fighters are exempted from this practice and integrated into the regular armed forces in order to sustain a functioning military body. In Ivory Coast, about half of the targeted 10,000 combatants were integrated into the army, while the others underwent demobilisation. During the process of demobilisation, former fighters may receive immediate support in the form of medical checks, information on HIV/AIDS, direct cash payments, tool kits or vocational training sessions.

## 4.3 Reintegration

Arguably the most complicated stage starts when former combatants arrive home and have to readjust to civilian life. While some fighters are respectfully welcomed back as heroes, others are eyed suspiciously and rejected by their host community. Child soldiers and fighters who belonged to very abusive and violent militias often meet with particularly hostile reactions from their communities (see Humphreys / Weinstein 2007). In northern Uganda and the DRC, some families refused to take back children who had been abducted and forced to fight in armed groups. As a former child soldier from the DRC recounted in an interview, “some of us – and especially those who lost their feet – were rejected by their families. The luckier ones were embraced” (Njata 2012).

A primary objective in this phase is the absorption of former fighters by the labour market, so that they gain access to income-generating activities and join their communities’ social networks. These not only replace the jobs and salaries they have lost, but also ensure that veterans develop a sense of belonging and well-being in their new civilian environment. In this endeavour, reintegration measures include different forms of support, which can roughly be divided into three categories: economic assistance, education and psychosocial support.

- **Economic assistance:** financial assistance is commonly awarded in the form of single payments, monthly rents or a number of instalments. The amount of money an ex-combatant receives varies from one country and programme to another. One of the lowest levels of financial assistance was given to returning soldiers in the DRC. They received a single payment of USD 11 when leaving the orientation centre, plus monthly payments of USD 25 for a number of months.<sup>5</sup> Combatants in Liberia and Rwanda received USD 300 and 350 respectively, while soldiers in Indonesia were each paid USD 500 in three instalments. In certain cases, the amount of compensation depends on the military rank of the individual concerned. Enlisted personnel in Burundi received only USD 91, while commanders were paid up to USD 586 (Caramés / Fisas / Sanz 2007, 32).
- **Education:** individuals lacking appropriate skills may receive basic education and vocational training and eventually assistance in finding a job or starting a business. This type of support is often outsourced to (smaller) NGOs. In northern Uganda, for example, the Norwegian Refugee Council (NRC) has been offering a one-year programme for war-affected adolescents since 1997. In addition to basic education (in reading, writing and arithmetic), adolescents receive lessons in human rights and democracy. They can then choose from training courses in catering, tailoring, carpentry and bricklaying. In the DRC, NGOs offer vocational training in car mechanics, handicraft, soap production and leatherwear. In Eritrea, the Ministry of Education, supported by the Japan International Cooperation Agency, ran 23 courses in construction, hairdressing, agriculture and plumbing. 1,722 demobilised soldiers received a total of USD 1.47 million as part of a microcredit and loan plan (Sanz 2009a).
- **Psychosocial support:** this is another, somewhat less prominent field. The objective is to foster the social and psychological well-being of ex-combatants in their daily lives, and also to nurture their ability to build social relationships, pursue careers and relate to their communities (MDRP 2006). Activities take different forms, ranging from psychological counselling in private sessions to collective role-plays and traditional ceremonies.

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5 There is no reliable account of how long these monthly payments were made.

When do disarmament, demobilisation and reintegration programmes succeed?

<b>Table 2: The three components of DDR</b>	
<b>Phase</b>	<b>Support</b>
Disarmament	Assembly of soldiers, documentation, and collection and sometimes destruction of weapons
Demobilisation	Cantonment of soldiers Supplying basic needs, i.e. food, medication, housing, clothing, basic education and counselling Census Discharge documentation Sometimes first part of reinsertion package Transport to home town
Reinsertion/ Reintegration	Job generation and placement Education and training Provision of tool kits, clothing, food and housing materials Distribution of farmland Credit schemes Psychological counselling Direct financial assistance, i.e. cash payments and loans
Source: Own data	

## **5 Successes and failures: a mixed track record**

As attempts to support the transition from war to peace, DDR interventions have recorded some impressive achievements in terms of demobilisation and disarmament. Nicaragua, Bosnia-Herzegovina and Sierra Leone are just three examples of countries where armed forces have been efficiently reduced in size and weapons collected. In 31 months, the Sandinista National Liberation Front in Nicaragua was reduced from 90,000 members to just 15,520 active soldiers (Rolston 2007, 264). 370,000 combatants were demobilised in Bosnia-Herzegovina in the five years following the Dayton peace settlement, leading to a noteworthy reduction in the number of arms in circulation (Pietz 2004, 24). In Sierra Leone, expectations were even exceeded. Although previous estimates suggested that 45,000 combatants needed to be demobilised from the Revolutionary United Front (RUF), the Civil Defence Forces (CDF) and other militant groups, in practice no fewer than 75,490 combatants<sup>6</sup> handed in their weapons (United Nations 2011). The efficient demobilisation and disarmament operation has undoubtedly helped to prevent a renewed outbreak of war in these countries.

These success stories are complemented by numerous failures and setbacks. The cases of Cambodia and Angola demonstrate that, despite immense efforts, DDR programmes sometimes fail in their endeavours. During demobilisation and disarmament efforts in Cambodia (1992), the warring parties cooperated only hesitantly and frequently blocked the UN's work. In the first attempt at disarmament, only around 13,000 out of the projected total of 200,000 soldiers reported to the cantonment sites. Even worse, one of the main armies, the Party of Democratic Kampuchea (also known as the Khmer Rouge), refused all along to disarm and exploited the fading military strength of the compliant

6 ≈10,000 ex-Sierra Leone Army/Armed Forces Revolutionary Council (ex-SLA/AFRC), plus 55,000 CDF combatants, 7,000 RUF soldiers and 3,000 child combatants as well as 300 disabled combatants

armed groups by taking aggressive action and mounting attacks. The UN Secretary-General suspended the programme for this reason in November 1992. Seven years later, the World Bank made a renewed attempt to demobilise and reintegrate Cambodia's soldiers. The international lender targeted 30,000 soldiers with USD 18.4 million in funds and a detailed plan (Center for International Cooperation and Security 2008a). Four years later, the World Bank cut spending by USD 6.3 million due to mismanagement and corruption. In the end, the final report rated the programme's performance and outcome as 'rather unsatisfactory' (World Bank 2006).

A similar failure was experienced in Angola. During an attempt to disarm combatants in Angola in 1994, a resistance force called UNITA (the National Union for the Complete Independence of Angola) sent mainly disabled and conscripted soldiers to the disarmament sites, leaving its key forces intact (Center for International Cooperation and Security 2008b). In the end, no full disarmament was achieved, faith in and commitment to the peace process evaporated and hostilities resumed.

Both cases illustrate that DDR programmes do not always work and may fail despite immense efforts. However, it is not easy to judge whether DDR is a success or failure. In the academic literature, the merits of peace missions in general are determined mainly by observing whether such missions have achieved their long-term objective, namely the stabilisation of war-torn countries and hence the establishment of stable peace. As the Final Report produced by the SIDDR states, "*when implemented, the DDR programme should ideally influence and contribute to a secure environment that can provide minimum basic conditions to enable long-term development without the immediate threat of violent conflicts*" (SIDDR 2006, iv).

As Table 3 shows, out of 40 countries undergoing DDR, 24 experienced long-lasting peace, while in the remaining 16 cases the warring parties resumed their hostilities. However, programme evaluations rarely use peace as an indicator and rely more on practical measures – that is, if any evaluation takes place at all. The only detailed programme evaluations are conducted by the World Bank, which uses a thorough evaluation process, including general conflict indicators, to match achievements against previously set goals (World Bank 2010). In many cases, however, there is no systematic evaluation and judgements about the effectiveness of individual missions can at best be derived from descriptive mission reports.

<b>Table 3: DDR and lasting peace</b>			
	Without DDR	With DDR	Total
No reversion to conflict	75 (40%)	24 (60%)	99
Reversion to conflict	117 (61%)	16 (39%)	133
Total	192	40	232
Pearson chi square ( $\chi^2$ )= 5.98 (*) Cramér's V = - 0.16			
*** = p < 0.01; ** = p < 0.05; * = p < 0.1			
Source: Information on DDR: own data. Information on conflict termination / reversion were taken from the Uppsala Conflict Data Programme (UCDP) Peace Agreement Dataset v. 1.0, 1989-2005 (Harbom / Högbladh / Wallenstee 2006) and the UCDP Conflict Termination dataset v.2010-1, 1946–2009.			

## 6 When does DDR work?

While countries employing DDR generally seem to have a better chance of remaining at peace than countries that do not undergo DDR, 40% of the former still experience a renewed outbreak of violence. This raises the following question: what are the conditions in which DDR programmes are successful? What does the literature tell us about the success factors for DDR?

When discussing the effectiveness and impact of DDR programmes, scholars and practitioners look at slightly different sets of variables. Academic studies tend to pay somewhat more attention to macro-conditions, i.e. structural factors that affect DDR programmes. These comprise notably the social, political and economic conditions that need to be met for a programme to be set up and carried out. Academic researchers are also interested in the characteristics of the conflict in relation to which a DDR programme is launched, and the role of third-party actors. Most practitioners, on the other hand, are more concerned with the technical aspects and architectural design of DDR interventions. Oddly enough, while both acknowledge, at least conceptually, that the combatants' characteristics and pre-dispositions matter a great deal, few studies have looked directly at individuals.

The following sections review the main findings on DDR and look at the success factors in greater detail. This literature review covers all levels of analysis, from macro to meso and micro levels. It uses a wide lens, incorporating findings from studies on peace-building and peace-keeping as well as other research on the structural determinants of durable peace.

### 6.1 The macro level: the broader context

#### 6.1.1 Economic factors

The notion that low-income countries run a higher risk of civil war and struggle harder to become peaceful again is widely accepted among political scientists and economists (Bazzi / Blattman 2011; Blattman / Miguel 2010). A dependence on primary commodity exports is also seen as raising the likelihood of conflict and war (Collier / Hoeffler 2004). These economic theories of insurrection, which can be traced back to Tullock (1971), Grossman (1991) and Lichbach (1995), are based on an assumption that opportunity cost considerations lead to rebellion. The opportunity cost argument is exactly what drives the international community to implement DDR: the opportunity cost for fighters to return to combat should be raised so high that it is more attractive for them to work as civilians than to remain soldiers.

However, DDR programmes have only limited tools with which to bring this about. They can offer vocational training to provide combatants with relevant skills for the civilian labour market. They can grant combatants loans with which to start their own businesses, and provide other types of initial help. DDR programmes will find it more difficult to get off the ground, however, if the civilian economy is shattered. If income-generating opportunities even for skilled individuals are simply lacking, the vocational training offered by DDR initiatives will not produce the desired effect of giving former combatants

an alternative to employment in armed groups. This dilemma is illustrated by anecdotal evidence from the Democratic Republic of the Congo (DRC). During interviews in Bukavu, a small town in the east of the DRC, young demobilised combatants explained that they were thinking of rejoining rebel groups if, having been trained as carpenters with the support of certain non-governmental organisations (NGOs), they continued to be short of customers. Caught in a trap of poverty and boredom, they began to see returning to the bush as a more desirable alternative (Banholzer 2013).

Practitioners meeting at the International Peace Academy in 2002 likewise observed that high unemployment rates and shattered economies hampered DDR (International Peace Academy 2002, 3). The problem in such settings, as Knight and Özerdem point out (2004, 516), is that combatants who are reintegrated into civil society are “*reintegrated into poverty*”, which ultimately lowers the opportunity cost of taking up arms again. In badly performing economies that are unable to absorb returning combatants, the latter may concentrate in urban areas and in the worst case resort to criminal activities or rejoin armed groups, as Kingma (1997) and Kingma and Grebrowold (1998, 12) have noted. Empirical evidence from a study of over 7,000 Somali combatants suggests that combatants are more willing to disarm if there is a prospect of returning to an economically stable region, as compared with combatants who return to an economically unstable region (Banholzer / Schneider / Odenwald 2013).

However, while economic stability might favour the peace process, there is no guarantee that combatants will reintegrate easily in well-performing economies. Even in economically healthy settings, former fighters may have problems in finding new occupations if they are stigmatised or socially excluded, for example. In Northern Ireland, members of armed groups who were released from prison after the Belfast Agreement had great difficulties in finding a job because of their past records, even though the labour market would have been capable of absorbing them (Rolston 2007, 271).

In sum, the endurance of structural economic causes of civil war hampers DDR. DDR cannot – and is not meant to – improve a country’s overall economic situation. It can only improve individuals’ economic position. While good economic conditions would appear to favour the DDR process, there is no guarantee for this. Apart from poor economic structures, the social rejection of former combatants can also hamper their transition to a civilian life.

### 6.1.2 Political context: regime type and state capacity

Does the political context affect the success of DDR? Certainly in the broader civil war literature, the political context is thought to matter a great deal for the outbreak of civil war and the transformation from war to peace in its aftermath.

For example, regime type is a widely discussed factor. Using a rather static concept of regime type, Hegre et al. (2001) demonstrated that very democratic and very autocratic states run a low risk of war, while mixed forms of government are more prone to war. A study published in the same year by Hartzell, Hoddie and Rothschild (2001, 189), however, found, in line with Dixon (1994) and Mansfield and Snyder (2005), that the presence of a semi-democratic or democratic regime (prior to the conflict) increases the

chance of lasting peace, whereas the presence of highly autocratic regimes reduces the chance. Central to their argument is the belief that the inclusion of opponents through political institutions reduces their anxiety and decreases the likelihood of defections and violations of peace settlements. Dixon (1994) theoretically explained his findings by arguing that democracies have more efficient tools for resolving conflicts at an early stage and are significantly more likely to reach peaceful settlements. This possibility of participation could potentially also foster the success of DDR programmes if combatants feel that they can voice their concerns and contribute to political decisions. However, no studies have yet investigated this potential link.

In a major quantitative study of abducted members of the Lord's Resistance Army (LRA) in northern Uganda, Blattman (2009) showed that former combatants actually enjoyed greater political participation than individuals who had not been abducted. In fact, former combatants were 22 percent more likely to vote, twice as likely to be community leaders or have another political occupation, and 73 percent more likely to be members of a peace-promoting organisation (Blattman 2009).<sup>7</sup> This could be evidence that participation and political ownership do matter a great deal to combatants. However, further research is needed to understand the underlying motivations and consequences.

Even though no systematic cross-sectional studies have specifically addressed the issue of regime type and its effect on DDR programmes, DDR case studies in authoritarian contexts suggest that DDR can work effectively if the government is committed to DDR. Tajikistan is a case in point (Matveeva 2012, 30). Matveeva describes the absence of transparency and accountability as a virtue for the DDR process. In this particular case, it allowed the government to start collaborating with enemy field commanders and to close their eyes to their self-enrichment in return for them not spoiling the peace process (including DDR) and accepting the government's consolidation of power. However, Kingma and Grebrowold (1998) also emphasise that the absence of a legal system or other forms of peaceful conflict-solving mechanisms can lead to the failure of DDR initiatives. The absence of a legal system entails a risk of even minor disputes resulting in the resumption of armed conflict because there are no mechanisms for resolving them peacefully.

Apart from the type of political regime, a key political factor contributing to the success of DDR would appear to be the state's capacity. In their comparative study of DDR programmes in the horn of Africa, Kingma and Grebrowold (1998, 12) noted that greater state capacity is beneficial, since it enables governments both to fulfil their commitments and to provide the necessary security. An effective police force is essential, for example, to ensure that ex-combatants and communities are protected and also so that people do not feel that they need to keep their arms in order to protect themselves. Also, reintegration is more difficult in regions with high levels of insecurity and political unrest. This security is missing in the DRC, for example. Demobilised combatants reported that the money they had received from the DDR programme (CONADER) had immediately been stolen by CNDP rebels. Combatants from various groups also reported an increase in punishments after the launch of the DDR programme – most likely to deter their members from

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7 Due to the forced abduction of more or less all members of the LRA, self-selection was close to zero. The greater degree of political engagement may therefore be attributed exclusively to the combatant's war experience.

participation. Combatants already in the DDR programme were threatened to be killed or arrested by the CNDP if they continued taking part in the DDR programme (Richards 2013, 9).

In conclusion, there is no systematic empirical evidence that particular regime types actually foster or hamper DDR, although theoretical considerations do suggest that opportunities for democratic participation and an effective legal system could help prevent conflict. State capacity, on the other hand, is clearly regarded as a boon to the DDR process since it enables the state to stick to its commitments and provide the requisite level of security.

### 6.1.3 A wider recovery strategy

The influence of both economic stability and political capacity show that a wider recovery strategy or peace-building framework in which DDR is embedded is conducive, if not absolutely essential, to the DDR process. There is a broad consensus that DDR should not stand on its own. An overall aid strategy can help not only to improve the overall economic environment and thus improve the chances of new civilian jobs being created, but also to build state capacity and create democratic institutions. In addition, it ensures that aid is not directed unilaterally at former combatants, as this can provoke intense jealousy among the rest of the population suffering from the consequences of war. In her study of former combatants in Liberia, Jennings (2007) found, for example, that civilians felt neglected and jealous of the special attention paid to former combatants. This resulted in a wave of civilians pretending to be combatants and trying to register for the DDR programme in order to receive the benefits as well. Caught in the act, one civilian justified his cheating by claiming that *“I suffered too, so I should benefit too”* (Jennings 2007, 211).

A comprehensive support plan, in which other forms of support are offered to the rest of the civilian population, is therefore needed and can help prevent feelings of hostility towards the combatants. A wider recovery framework is essential to ensure that DDR is embedded in a favourable environment and that aid reaches both combatants and the rest of the war-affected population.

### 6.1.4 Third-party actors

Is it good for a third party to be involved in DDR? External actors are involved in almost every DDR intervention, playing either a supporting or a leadership role. However, the influence of third-party missions in post-war situations is disputed. While scholars such as Walter (1997) regard third-party interventions as a decisive factor in the success of credible commitments, others view their role more cautiously (e.g. Hartzell / Hoddie / Rothschild 2001). Walter argues that the presence of a strong third party can help the conflicting parties to overcome compliance problems by monitoring, observing and in some cases even enforcing compliance. There seems to be evidence that this also applies to DDR programmes. As Alden (2002, 354) points out, the advantage for DDR missions is that, while external actors cannot replace the political will and commitment of the warring parties, they can indeed encourage participation and strengthen their commitment. Also,

by signalling that peace efforts are serious and credible, external actors can reassure combatants that hostilities have indeed finally ceased (Knight / Özerdem 204, 501).

Disarmament processes that take place under external supervision seem more capable of resulting in sufficiently credible commitments for the conflicting parties to dare to relinquish their weapons without having to fear severe consequences. In a qualitative study of ex-combatants in Liberia, Jennings (2007, 206) found that the UN's presence and supervision made a great difference. Several veterans confirmed that "*they wouldn't have voluntarily disarmed except to UN peacekeepers*". In Mozambique, RENAMO soldiers said that they would not demobilise until the blue helmets had arrived. The opposing FRETELIN faction, on the other hand, regarded a UN intervention as a "*violation of national sovereignty*" (Striuli 2012, 44).

Unfortunately, empirical cross-sectional studies examining the presence of third-party interventions are limited to peace missions in general and do not specifically address DDR. Such general studies reach divergent conclusions about the virtue of third-party interventions (e.g. Gurr / Moore 1997; Gurr 1994; Doyle / Sambanis 2000; Hartzell / Hoddie / Rothchild 2001; Fortna 2004; Krain 2005; Melander 2009; Hultmann 2010; Bussmann / Schneider 2010). Doyle and Sambanis (2000), as well as Hartzell, Hoddie and Rothchild (2001), found that multilateral and UN peace-keeping operations had a favourable effect on peace-building. By contrast, both Dubey (2002) and Mukherjee (2006) concluded that third-party peace-keeping had no significant impact on the duration of peace. Hultmann (2010) even argued that the presence of peace-keeping missions can trigger violence against civilians.

However, it should be borne in mind that cross-sectional studies need to factor in the selection bias of the operational locations of peace-keeping and peace-building missions. In other words, studies examining the correlation between the presence of third-party actors and the eruption of violence need to take account of the fact that most such missions are deployed in places "*where murders lurk*" (Melander 2009, 389) and therefore generally encounter a higher risk of violence. The effect of international missions – and this also applies to DDR missions – on the duration of peace can be adequately modelled and estimated only if the non-randomised selection of peace missions is taken into account. If the selection bias is taken into account, peace missions in general seem to have a positive effect on peace (Hofmann / Schaffer 2009, 308; Melander 2009; Fortna 2004).<sup>8</sup>

With regard to third-party actors, practitioners and social scientists alike have also fiercely debated the importance of national ownership as a primary predisposition for success. At the 60th UN General Assembly, former UN Secretary-General Kofi Annan expressed the UN's recognition of "*genuine, effective, and broad national ownership of the disarmament, demobilisation and reintegration process*" (Knight 2008, 46). The thinking

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8 Scholars have used a variety of methods to account for this problem. Fortna (2004), for example, attempted to factor in the selection bias by separately analysing the deployment of peace missions and the effect of these missions on the duration of peace. Hofmann and Schaffer (2009) point out, however, that a purely theoretical acknowledgement of the problem is insufficient. Rather, the selection bias needs to be factored in empirically. Failing to do so may lead to incorrect standard errors and incorrect significance tests (Boehmke / Morey / Shannon 2006).

is that a sense of ownership in the DDR process can prevent ex-combatants from turning into spoilers of the peace process. Rolston (2007) singles out the establishment of national ownership as one of the two most important factors for DDR success. While agreeing with Rolston on the potential of ownership, Dahl Thruelsen (2006) raises concerns about the potential adverse effects that could arise when local actors take over responsibilities without having the necessary institutional and human resource capacities.

Related to this matter is the question of whether international leadership favours the probability of DDR success. Large international organisations such as the UN or the World Bank bring a large stock of knowledge in terms of planning and implementing these programmes, as well as capacities and resources that national governments might lack. Proponents of international leadership argue that, in post-war settings, local governments are often institutionally weak and prone to corruption and inefficiency. They point to examples like the National Commission on Disarmament, Demobilisation and Reintegration (CONADER) in the DRC, a commission led by the Congolese government, which was founded in an attempt to establish national ownership in the DDR process. Despite its good intentions, it has been held responsible for delays in delivering assistance to combatants, failures to provide the requisite resources to the country offices and a lack of competence in managing and coordinating the DDR process (Handson 2007). In Mozambique, donors preferred to finance NGOs instead of local partners because the latter were regarded as unreliable (Striuli 2012, 15). Problems with dishonest implementation partners were also reported in Afghanistan (Giustozzi 2012, 59).

In sum, there is evidence that the presence of a third party can assist the conflicting parties on their way towards completing the DDR process by overcoming compliance problems. However, no cross-sectional studies focusing explicitly on DDR have been carried out. Even where a third party is on the ground, national ownership is regarded as essential although international leadership seems to be preferred so that sufficient capacity is guaranteed.

### 6.1.5 State of the conflict

Another characteristic hotly debated among practitioners is the state of the conflict. More precisely, the point at issue is whether a conflict must already have been terminated when DDR is started, or whether DDR programmes can be launched while the conflict is still ongoing. Opinions are somewhat divided on this point.

Some argue that DDR programmes can start prior to the formal conclusion of war, while others disagree. The DDR programme initiated in Congo-Brazzaville in 2005 commenced while the war was still ongoing and is cited as an example of a helpful initiative that helped to build confidence in the peace process and thus generated an impetus for a comprehensive peace agreement (International Peace Academy 2002). Others insist, however, that peace is an indispensable precondition for successful DDR. Attempts to initiate the DDR process during wartime failed in Angola and Sierra Leone. One danger, for example, is that DDR sites are used as recruitment centres for combatants (ibid., 3). In a cross-sectional comparison, Banholzer (2013) found not only that DDR was implemented in most cases (i.e. about 65%) after (major) hostilities had ceased, but also that there was strong evidence of a negative correlation between implementation *after*

termination and the renewed onset of war, assuming all other variables are constant. In other words, starting DDR in a setting where fighting has stopped increases the chances of success. In this regard, DDR seems to be more suited as a peace-stabilising tool than as a means to end war.

## 6.2 The meso level: the actual programme

The above-mentioned research focuses on the broader economic, political and conflict settings in which DDR is launched. Other studies pay more attention to the technical aspects of DDR programmes such as timing, sequencing and programme design.

### 6.2.1 Timing

On average, one year passes between the end of hostilities and/or the signing of a peace agreement and the initiation of DDR (Caramés / Fisas / Luz 2006, 8). The time span between the end of war and the start of DDR differs immensely from one country to another. Some programmes, including those in Afghanistan, the Central African Republic and Burundi, were launched while hostilities were ongoing. Others started quite soon after a peace agreement or ceasefire, as in Angola, Indonesia and Sierra Leone, where all the programmes were launched within less than four months. However, it can also take several months or even years to initiate DDR, as was the case in Eritrea and Congo-Brazzaville.

Without doubt, postponing the start of DDR initiatives for too long only protracts the problem. However, scholars and practitioners seem to agree that an immediate start is not necessarily a precondition for success. Caramés / Fisas / Luz (2006, 9) state that “*the rapid beginning of a DDR does not [...] guarantee in the least its good progress nor the shortness of the disarmament and demobilisation period.*” However, Cox (1996) notes that, if DDR programmes are postponed for too long, “*both the parties and the peacekeepers begin to turn away from the commitment, and the resulting erosion of the mandate starts an irreversible process*” (ibid., 132).

### 6.2.2 Sequencing and incomplete programmes

Apart from getting the timing right, many practitioners see sequencing as a major issue for DDR programmes. While most academic studies on DDR regard programme progress as a “continuum” in which one step follows the next, practitioners argue that it might be beneficial to start the reintegration process in parallel with disarmament and demobilisation, thereby engendering confidence and convincing other combatants to follow suit (International Peace Academy 2002, 3). Social scientists for their part tend to regard an incomplete DDR process as a major obstacle to success. Citing Mozambique as an example, Knight / Özerdem (2004) pinpointed unfinished or interrupted demobilisation as the main cause of the proliferation of weapons and their spread into neighbouring countries. Of equal concern are demobilisation processes which are not followed by a programme stage focusing on reintegration, as the latter is intended to address potential sources of frustration encountered by former combatants when returning from war

(Rolston 2007). Former combatants who are not absorbed into the legitimate workforce often resort to crime. A failure to address the grievances of ex-combatants in reintegration support activities can lead them to remobilise, as was seen in Ethiopia and Eritrea (Knight / Özerdem 2004).

### 6.2.3 Child soldiers

Another aspect of the more technical debate on DDR is programme design, most notably the handling of vulnerable groups. Children, for example, require special attention both as victims of hostilities and as instruments of violence. There seems to be a consensus that an essential precondition of successful DDR is therefore a programme design that addresses these distinct needs (Knight 2008; International Peace Academy 2002). In fact, while it is fiercely debated whether DDR initiatives prior to the end of a conflict make sense, there is overwhelming agreement across studies that children should be extracted out of armed groups regardless of whether an official settlement has been reached. In fact, citing Burundi as an example, Knight (2008) even argues that the demobilisation of children ahead of the official initiation of DDR has a positive impact as it builds confidence and trust.

### 6.2.4 Eligible groups

DDR programmes must be designed in such a way that they do not raise unnecessary barriers for combatants wishing to enrol. In the DRC, for example, the adherence to the “one weapon, one combatant” principle made certain combatants ineligible for the process. A commander from the Mai-Mai Simba reported, for example, that his troop of 30 men owned only ten weapons (Richards 2013, 7). In a similar vein, members of the Mai-Mai Kifuafua reported that they carried various other weapons such as machetes, knives and spears, but that firearms were often shared among a number of soldiers. In fact, members of several armed groups stated that weapons were only distributed to combatants before they went into combat or to people deployed as guards, and that they were otherwise handed back to a general depot (ibid.).

Since women from militant groups are not considered as great a security risk as male soldiers, they receive little attention in post-war situations (Knight 2008). Due to their infrequent participation in actual combat, women often fail to meet DDR eligibility criteria. The World Bank warns that DDR programmes tend to focus solely on the needs of young men and fail to address women’s needs. In Mozambique, for example, resettlement allowances were offered only to men and only men’s clothing was available for returning soldiers, even though many of the combatants were female (Knight 2008). There would therefore appear to be agreement that extra programmes addressing the needs of female combatants can positively influence DDR outcomes.

### 6.2.5 Tailored assistance

The final aspect of the debate on DDR programme design is how to offer the right kind of help to returning combatants and thus prevent soldiers from becoming frustrated.

When do disarmament, demobilisation and reintegration programmes succeed?

Vocational training and other educational measures are a good example. These are generally provided to returning combatants with the aim of building a foundation for peaceful income-generating activities such as farming, bricklaying, carpentry, car mechanics and so forth. As we have already mentioned, demobilised soldiers usually possess certain abilities that are useful in the civilian labour market, such as discipline and teamwork.

However, as Rolston (2007, 263) rightly states, *“what such ex-combatants lack is not ability but credentials”* since they have often missed out on formal education. Practitioners thus warn that training needs to be adapted to the demand for specific types of skills in the respective economies. In Mozambique, ex-combatants had great difficulties in finding employment in the fields in which they had been trained. In short, programme design should always include a thorough labour market assessment and take account of the job opportunities available in local markets.

### 6.3 The micro level: individuals

A much smaller, yet no less important, body of literature looks at the characteristics of individual combatants. As Verwimp et al. (2009, 307) point out,

*“at a fundamental level, conflict originates from individuals’ behaviour and their interactions with their immediate surroundings, in other words, from the micro-foundations. However, most programmes of conflict resolution, prevention and mediation are typically driven by regional, national and international perspectives.”*

Even though the number of researchers focusing on the micro-foundations of civil war through the systematic collection of individual or sub-national data is still relatively small, more and more serious attempts have been made to address this research gap (see Humphreys / Weinstein 2008; Humphreys / Weinstein 2007; Arjona / Kalyvas 2006; Pugel 2007 and Blattman 2010). Two questions are central to these studies:

1. Do individuals really benefit from DDR programmes?
2. What personal characteristics and experiences facilitate or impede their success in demobilisation and reintegration?

#### 6.3.1 Participants vs. non-participants

The first question can be addressed only by comparing combatants who take part in DDR activities with those who do not. However, the lion’s share of studies focus exclusively on ex-combatants taking part in DDR programmes and disregard proper “control groups” in the form of comparable non-participants. Those looking at both groups have reached contradictory results. In an extensive field research project in Sierra Leone in 2003, Humphreys and Weinstein (2007, 533) concluded that participants in reintegration programmes are not better reintegrated than non-participants: *“Our examination of DDR programmes produces little evidence in support of claims that these effectively break down factional structures and facilitate reintegration. Combatants not exposed to the*

*DDR programme appear to reintegrate just as successfully as those that participated.*” If this is true, then an enormous amount of financial resources is being wasted every year.

Results from a similar study, conducted by Pugel in Liberia in 2006, point in a different direction. He found that “[...] *empirical evidence supports the finding that those former combatants who registered with the national DDR programme and completed a course of reintegration training have reintegrated more successfully than those ex-combatants who chose not to participate and reintegrate on their own*”. The study also revealed that ex-combatants who formally disarmed, registered and completed a programme of internationally funded reintegration training were better off in terms of their socio-economic situation than a comparable group of former fighters who did not participate in the national DDR programme (Pugel 2007, 6).

Similarly, using a quasi-experimental design to compare a group of non-participants with participants in a reintegration programme in northern Uganda, Banholzer (2012) observed a marked difference in the development of social capital between the two groups. Former child soldiers taking part in an educational/vocational training programme scored higher on “hard” and “soft” indicators of social capital such as the number of friends, club membership and trust and a sense of belonging to a family and community. However, and in line with Humphreys and Weinstein (2007), she did not find any difference between the main and control groups in the level of acceptance and the feeling of attachment to their former rebel group. What these mixed results demonstrate is that more efforts need to be invested in the careful design of indicators capturing concepts such as “reintegration” so as to increase their comparability.

### 6.3.2 Sociometric characteristics

Every returning combatant has to deal with his or her own personal situation, which will arguably influence his or her willingness and ability to disarm and reintegrate. So what do we know about the influence of individual characteristics and experiences, and how these unique features might lead to the failure or success of DDR?

*Economic considerations* not only play a role in terms of country-specific growth rates or stability. They are also thought to affect an individual’s choices to arm, disarm or rearm. Although the “greed argument”, i.e. the notion that individuals join rebel groups for economic reasons, has found a great echo in social scientific research (e.g. Weinstein 2005; Oyefusi 2008), not all researchers have found empirical evidence for this hypothesis at a micro level. In fact, Deininger (2003) is one of the few to present proof that a scarcity of economic opportunities, the presence of expropriable wealth and low levels of human capital (which in turn lessen the prospects of getting a job in the regular economy) all increase the likelihood of individuals joining rebel groups. Providing further support for the proponents of the opportunity cost argument, Oyefusi (2008) concludes that low income levels encourage individuals to participate in rebel organisations.

Other studies find surprisingly little support for the greed argument, however. In Liberia, only 4% of rebels cited “money” as the main incentive for joining a rebel organisation (Pugel 2007, 36). In their survey of Colombian combatants, Arjona and Kalyvas (2006) also found no evidence that individuals join a militant group for economic reasons.

However, while there is likely to be some similarity of motivation, the reasons for joining an armed group and for either staying with or leaving an armed group need not be entirely identical. Unfortunately, very few systematic studies have been performed of why fighters decide to leave an armed group, most probably because it is difficult to gather this information from active combatants. The study of Somalian combatants by Banholzer, Schneider and Odenwald (2013) forms an exception here, as it uses a data set of active Somalian soldiers in a wide range of militant organisations. The analysis reveals that wealthy fighters (i.e. those claiming to possess valuable property) are more reluctant to disarm. Equally, soldiers paid with *khat* (a narcotic drug) are less keen to enrol in DDR programmes. *Khat* is a valued form of payment because it often proves more of a stable “currency” than money and can easily be sold-on. In both cases, combatants seem to profit from instability and the war economy and are therefore less motivated to end the *status quo*.

Being well-off rather than poor is also a hindrance with regard to reintegration. Humphreys and Weinstein (2007) report that wealthier and better educated combatants find it more difficult to reintegrate – a surprising outcome considering that they should have better chances of finding new jobs and sustaining themselves. But again, this shows that a closer look needs to be taken at the potential opportunity costs.

*Age* is an influential determinant of individuals’ behaviour. A distinction is made in this regard between regular soldiers and soldiers who join an armed group as children. Several studies show that the lives of young individuals are particularly impacted by combat experiences – a finding that needs further investigation given that rebel organisations are increasingly recruiting children as soldiers. The invention and spread of small arms, which can even be operated by children under the age of ten, have been a prime factor in making children attractive targets for recruiters. However, views about the impact of age in the context of DDR vary. Some sources regard child soldiers as “*damaged, uneducated pariahs*”, as Blattman and Annan (2010) cite a *New York Times* editorial, or as “*future barbarians*” and “*killing machines*” (Verhey 2001, 1). Trying to reintegrate these children and adolescents is often seen as a hopeless task (ibid., 1).

Other academic studies have found evidence that former child soldiers can re-enter civilian life if given adequate support (Boothby / Crawford / Halperin 2006, 87). Unfortunately, most studies still rely on ethnographical evidence. There are “*virtually no representative data or well-identified estimates*” (Blattman / Annan, 2010, 882), as Blattman and Miguel (2010) and Blattman and Annan (2010) point out. One of the few large-scale micro-level studies, the Survey of War-Affected Youth (n=1000) conducted by Blattman and Annan (2010), found evidence that children in the LRA, the Northern Ugandan rebel group, were as likely to be employed after demobilisation as their non-fighting comrades. However, they were half as likely to be engaged in skilled jobs and they thus earned one third less on average – notably due to the education they had missed while in the bush. Despite this observation, the authors concluded that the impact of war on young Ugandans might be less severe than often cited and that “*(the) result speaks to a remarkable resilience among youth, even among those youth reporting the highest levels of distress*” (Blattman / Annan 2010, 883).

Other studies report high levels of social isolation and the formation of sub-groups among children who had shared the same faith during war, leading in turn to exclusion and hostile

reactions from the host community (Elbert / Weierstall / Schauer 2010). Systematic interviews with former LRA rebels indicated that the younger a child was at the time of their abduction, the harder it was for them to form a trusting relationship and a sense of belonging to a host community after leaving their armed group. Children also find it harder to form new friendships (Banholzer 2012). Observing similar patterns, Humphreys and Weinstein (2007) noted a correlation between joining at a young age and later reintegration struggles.

A possible explanation for the social troubles of child soldiers in the aftermath of war is provided by an analysis of individual-level data on combatants collected in the eastern provinces of the DRC by Weierstall et al. (2013). This study shows that younger individuals not only tend to commit themselves more firmly to the violent lifestyle required to survive in rebel groups, but are also more likely to enjoy perpetrating violence or – to use the psychological jargon – to develop “appetitive aggression”. It is probably the anti-social and aggressive behaviour of young recruits that leads them to be rejected by their host communities, which in turn leaves them with a feeling of alienation and social impoverishment.

*Gender* is also assumed to influence an individual’s chances of disarmament, demobilisation and reintegration. While the “standard” ex-combatant is usually thought of as male, militant groups contain large numbers of girls and women. Despite the examples of female soldiers (e.g. in the Tamil Tigers), a more common role for women is to be abused as sex slaves and coerced “wives”, or to act as carriers, cooks or spies (McKay / Mazurana 2004). Deprived of formal ranks within most militant groups, girls are often disregarded and insufficiently involved in the demobilisation and reintegration process. McKay and Mazurana (2004, 36) complained that none of the formal DDR programmes in northern Uganda, Sierra Leone and Mozambique adequately considered the needs of returning women, although these were acute. In these countries, many female members of armed groups were sent straight home to their communities, without being offered any assistance. Acts of sexual violence, which many females have to endure during their time with militant groups, are not just traumatic experiences. The consequences include sexually transmitted diseases, unwanted pregnancies and motherhood. Even if their sexual relations within militant groups are involuntary, returning girls and women often face stigmatisation and rejection.

### 6.3.3 Traumatization and other psychological problems

Traumatization and other war-induced mental problems can be severe inhibiting factors for the successful reintegration of children and adults alike. In a representative sample (n=1114) of formerly abducted children in northern Uganda, Schauer and Elbert (2010) found that 48% of those who had been forced to stay with rebels for more than one month showed symptoms of post-traumatic stress disorder (PTSD). Other studies produced similar results. Vinck et al. (2007) found PTSD-related symptoms in 82% of formerly abducted children,<sup>9</sup> and 67% in a follow-up study (Pham / Vinck / Stover 2009).<sup>10</sup>

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9 The size of the sample in this study was 2,585. Adults were aged 18 years or older, and came from four districts in northern Uganda. The study was conducted in April and May 2005.

Interviewing 169 child soldiers in northern Uganda and the DRC, Bayer et al. (2007) found full symptoms of PTSD in 37% of them. This mental illness results in nightmares, flashbacks, hyper-arousal and avoidance, symptoms which place a severe strain on the individual's personal and social life. Individuals who have experienced traumatic events are also more likely to withdraw from their communities and to lose trust in them, as Dickson-Gomez (2002) showed in a qualitative study of four former child soldiers in El Salvador. To cope with their horrific past, many traumatised combatants are known to abuse drugs and alcohol, and often engage in criminal activities to fund their drug consumption.

Another noteworthy finding directly linking PTSD with DDR stems from a study by Banholzer, Schneider and Odenwald (2013). The authors found that the mental health of individual combatants greatly affected their willingness to disarm. Those combatants who were diagnosed with PTSD were less willing to hand in their weapons. People suffering from PTSD have an anxiety disorder and live in a constant state of fear. Their entire life is directed towards the past rather than the future. It is therefore understandable that these people are extremely reluctant to give up their weapons.

However, it is not just the disarmament process that may be hampered by soldiers suffering from this mental illness. People suffering from PTSD have been observed to experience serious problems during their reintegration process, indeed perhaps to an even greater extent. Mogapi (2004) notes that ex-combatants who suffer from mental illnesses have concentration difficulties, are extremely aggressive, have difficulties at work and are thus also more likely to lose their jobs. These struggles lead former fighters to experience feelings of helplessness and depression.

While child soldiers and adult combatants alike are exposed to mental illnesses, children appear to be more vulnerable and impacted by traumatic stress because they are still in a development process. Schauer and Elbert (2010) explain that exposure to specific stress factors during warfare causes the "*brain to develop along a stress-responsive pathway*" (ibid., 332). This means that brain structures are formed so that they are best adapted to survive the cruel world in which the child soldier grows up, a world of constant danger, violence and deprivation. As a consequence, the brain develops capabilities for reacting quickly to threats in the form of intense anger, aggression or fear (ibid., 332). These reactions persist even when war is over, causing immense difficulties in adapting to peaceful environments (ibid.; but see also Elbert et al. 2006 and Teicher et al. 2002).

Somasundaram's book entitled "Scarred Minds" (1998) adduces evidence that traumatic events can inhibit children's school careers. In a sample comprising six different schools in the northeast of Sri Lanka, up to 65% of children reported memory problems, between 30% and 60% claimed to have difficulties concentrating and 35-60% reported a loss of motivation to remain in education. The problems of war-affected children showcase the severe impact warfare can have on an individual's ability to carry on with their life when war is over, irrespective of the environment in which they live. Schauer and Elbert (2010,

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10 The size of the sample was 2,875. Participants were selected by means of multi-stage stratified cluster sampling, conducted in eight districts in northern Uganda.

347) warn that “another round in the cycle of violence seems inevitable if psychological wounds are not addressed. Children know that hidden weapons and former comrades are always waiting somewhere out there.” However, once the problem is diagnosed, PTSD can be effectively addressed and the symptoms reduced by treatment. Screening for and treating PTSD should therefore become standardised components of DDR programmes.

### 6.3.4 Personal wartime experiences

Alongside the above factors, the length of time an individual stays or is forced to stay with an armed group appears to affect the DDR process. For instance, rebels who stayed for more than a year in the RENAMO (Resistência Nacional Moçambican) base camp in Mozambique were found by Arnston and Boothby (2002, 3)<sup>11</sup> to exhibit a greater degree of anti-social and aggressive behaviour than combatants who spent a shorter period in the camp. Other studies argue that it might not be the absolute amount of time spent in the field, but rather the extent to which an individual was involved in violent combat, that shapes their attitudes and behaviour.

Empirical support for this argument comes from various commentators. Humphreys and Weinstein (2007, in Sierra Leone) concluded that individuals who had been members of very abusive militant groups faced greater difficulties during the reintegration process. Amone-P’Olak et al. (2007) noted that individuals who were forced to commit atrocities against their own families and communities broke their civil and social attachments. Many of these soldiers believed that they could never return home and thus preferred to stay with their militant group. As a Ugandan soldier explained, “I had to stay because, in the bush, killing is normal. At home I won’t be a person of any importance, I thought”.<sup>12</sup>

Based on the observation that a number of combatants in Somalia reported no involvement in violent combat at all, Banholzer, Schneider and Odenwald (2013) pointed to the distinction between the length of time spent by individuals in armed groups and the intensity of their combat experience. Being a member of an armed movement does not automatically imply close involvement in battles. This in turn influences the combatant’s willingness to disarm. Soldiers who have spent 20 years or more with an armed group are generally more reluctant to give up their weapons, whereas soldiers who have frequently been involved in combat tend to be fairly willing to disarm.

## 7 Conclusion and practical implications

As we have shown, failure to reintegrate returning fighters can have a highly disruptive impact on a country’s peace process. Every year, sizeable human and financial resources are invested in DDR programmes. While the prevailing international consensus suggests that the chance of peace is considerably higher if countries receive this form of aid during the critical transition from war to peace, only a small body of literature attempts to back

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11 The study embraced 42 former Mozambican boy soldiers, aged 6 to 16.

12 This quote comes from an original psychological session protocol with a former child soldier (ibid.: JM20) in northern Uganda.

this assumption with evidence. This discussion paper provides an overview of factors identified in the literature as contributing to the success of DDR programmes. The analytical conceptualisation helps to distinguish between context factors, programme factors and individual-level factors, all of which can – as the synthesis of the literature has shown – have quite different effects.

Even though we have discussed many of the factors that contribute to the success of DDR, some seem to stand out as being underpinned by more evidence than others.

- While DDR can improve the personal economic situation of combatants, it cannot improve the economy as a whole. It therefore needs either to be implemented in economically prosperous settings or to be accompanied by a broader recovery strategy. In the worst case, combatants might otherwise simply be reintegrated into poverty.
- There needs to be a certain degree of state capacity to ensure that governments are not only willing to carry out the DDR process, but also capable of fulfilling their commitments and providing security to the demobilised combatants. A functioning legal system and peaceful problem-solving mechanisms can help to “tame combatants” and prevent minor conflicts from escalating into major hostilities.
- The presence of a third party cannot replace the commitment of the warring factions to DDR, but it can provide a framework that facilitates the DDR process. If commitment is genuine, a third party can help by monitoring both sides’ compliance and thus have a positive impact on the feasibility of DDR.
- DDR hits its limits if implemented while hostilities are still ongoing. DDR should therefore be launched when violence has ebbed or a peace agreement has been signed. In this regard, DDR should be seen more as a peace-stabilising than as a peace-creating tool. As a great deal of trust in the peace process is required for combatants to be prepared to hand over their primary instruments of defence and income, launching such initiatives before the conflict is over seems to be asking too much.
- On a different note, programmes need to match the target group. All too often, members of armed groups – especially women – fall through the raster of DDR eligibility criteria even though they should receive help. On an equal footing, the type of skills training offered to combatants needs to be relevant to the local economy. Otherwise, participants will become deeply frustrated if they cannot find any employment.
- Finally, combatants should not be treated as a homogeneous group. Some former fighters may handle their return very well, while others will struggle immensely. The identification of these “high-risk” groups should be a key component of DDR preparations. The literature points in this connection especially to combatants who were recruited at a very young age and soldiers suffering from mental issues such as PTSD. Equally, individuals with low chances of finding alternative employment (i.e. those who remained with an armed group for many years or even decades) and those combatants profiting from the war economy (i.e. those who receive drugs as a salary substitute) will be less willing to disarm. Only by clearly identifying such groups is it possible to address their needs properly and for DDR to unfold its entire potential.

However, what this literature synthesis also shows is that much more research is needed in order to systematically observe those conditions that favour DDR and the peace process in general. While DDR programmes need to be accompanied by thorough evaluation processes, scholars should concentrate on gathering representative samples of combatants and start using comparable indicators in order to scale up comparability.

## Bibliography

- Afoaku, O. (2007): Congo's rebels: the origin, motivations, and strategies, in: J. F. Clark (ed.), *The African stakes of the Congo war*, Kampala: Fountain Publishers
- Alden, C. (2002): Making old soldiers fade away : lessons from the reintegration of demobilized soldiers in Mozambique, in: *Security Dialogue* 33 (3), 341–356
- Amone-P'Olak, K / N. Garnefski / V. Kraaij (2007): The impact of war experiences and physical abuse on formerly abducted boys in Northern Uganda, in: *South African Psychiatry Review* 10, 76–82
- Angrist, J. D. (1990): Lifetime earnings and the Vietnam era draft lottery : evidence from social security administrative records, in: *The American Economic Review* 80 (3), 313–336
- Annan, J. et al. (2011): Reintegration, civil war and gender in Northern Uganda, in: *Journal of Conflict Resolution* 55 (6), 877–908
- Arjona, A. M. / S. N. Kalyvas (2006): Preliminary results of a survey of demobilized combatants in Columbia; online: (accessed 5 July 2012)
- (2008): Rebellling against rebellion: comparing insurgent and counterinsurgent recruitment; online: <http://stathis.research.yale.edu/documents/ArjonaandKalyvasRecruitment2008.pdf> (accessed 5 July 2012)
- Arnston, L / N. Boothby (2002): *A world turned upside down: child soldiers in Mosambique: a case study of their reintegration*, Washington, DC: Save the Children
- Banholzer, L. (2012): *Rebuilding social capital*. Working Paper
- (2013): *Concerting combatants to civilians : a multilevel approach to successful DDR*, Konstanz: Universtity of Konstanz (dissertation)
- / G. Schneider / M. Odenwald (2013): *Who disarms? Evidence from the Somalian civil war*. Working Paper
- Bayer, C. P. / F. Klasen / H. Adam (2007): Association of trauma and PTSD symptoms with openness to reconciliation and feelings of revenge among former Ugandan and Congolese child soldiers, in: *The Journal of the American Medical Association* 298 (5), 555–559
- Bazzi S. / C. Blattman (2011): Economic shocks and conflict: the (absence of?) evidence from commodity prices (CGDEV Working Paper 247); online: <http://www.cgdev.org/publication/economic-shocks-and-conflict-absence-evidence-commodity-prices-working-paper-274> (accessed 5 January 2014)
- Beber, B. / C. Blattman (2010): The industrial organization of rebellion : the logic of forced labor and child soldiering; online: [http://www.gwu.edu/~igis/assets/docs/Blattman\\_Paper.pdf](http://www.gwu.edu/~igis/assets/docs/Blattman_Paper.pdf) (accessed 5 July 2012)
- Berdal, M. (1996): *Disarmament and demobilization after civil wars : arms, soldiers, and the termination of conflict*, Oxford: Oxford University Press
- Berger, M. C. / B. T. Hirsch (1983): The civilian earnings experience of Vietnam-era veterans, in: *Journal of Human Resources* 18 (4), 455–479
- Besley, T. / T. Persson (2008): Wars and state capacity, in: *Journal of the European Economic Association* 6 (2–3), 522–530
- Bieber, B. (2002): *Wie Kriege enden : Die Reintegration von Soldaten in Nachkriegsgesellschaften*, Band 49, Hamburg: Verlag Dr. Kovac (SOCIALIA Studienreihe soziologische Forschungsergebnisse)
- Blattman, C. (2009): From Violence to Voting : war and political participation in Uganda, in: *American Political Science Review*, 103 (2), 231–247
- / (2010): Post-conflict recovery in Africa : the micro level, in: E. Aryeetey et al. (eds.), *Oxford companion to the economics of Africa*, Oxford: Oxford University Press
- / E. Miguel (2010): Civil war, in: *Journal of Economic Literature* 48 (1), 3–57
- / J. Annan (2010): The consequence of child soldiering, in: *The Review of Economics and Statistics* 92 (4), 882–898
- Boehmke, F. / D. Morey / M. Shannon (2006): Selection bias and continuous-time duration models : consequences and a proposed solution, in: *American Journal of Political Science* 50 (1), 192–207
- Boothby, N. / J. Crawford / J. Halperin (2006): Mozambique child soldier life outcome study : lessons learned in rehabilitation and reintegration efforts, in: *Global Public Health* 1 (1), 87–107

- Born, D. (2009): Konflikt und soziales Vertrauen : Eine empirisch-quantitative Analyse, mimeo (master's degree thesis)
- Buhaug, H. / S. Gates (2002): The geography of civil war, in: *Journal of Peace Research* 39 (4), 417–433
- / J. K. Rød (2006): Local determinants of African civil wars, 1970–2001, in: *Political Geography* 25 (3), 315–335
- / S. Gates / P. Lujala (2009): Geography, rebel capability, and the duration of civil conflict, in: *Journal of Conflict Resolution* 53 (4), 544–569
- Bundervoet, T. (2009): Livestock, land and political power : the 1993 killings in Burundi, in: *Journal of Peace Research* 46 (3), 357–376
- Bussmann, M. / G. Schneider (2010): A porous humanitarian shield : the laws of war, the Red Cross, and the killing of civilians, presented at Annual Convention of the International Studies Association, New Orleans.
- Caramés, A. / V. Fisas / D. Luz (2006): Analysis of DDR programmes in the world during 2005, Bellaterra: School for a Culture of Peace
- / – / E. Sanz (2007): Analysis of DDR programmes in the world during 2006, Bellaterra: School for a Culture of Peace
- / E. Sanz (2008): Analysis of disarmament, demobilisation and reintegration (DDR) programmes in the world during 2007, Bellaterra: School for a Culture of Peace
- / – (2009): Analysis of disarmament, demobilisation and reintegration (DDR) programmes in the world during 2008, Bellaterra: School for a Culture of Peace
- Casas-Casas, A. / J. Guzmán-Gómez (2010): The eternal yesterday? The Colombian reintegration process as social dilemma, in: *Papel Político* 15 (1), 47–85
- Cederman, L.-E. / L. Girardin (2007): Beyond fractionalization: mapping ethnicity onto nationalist insurgencies, in: *American Political Science Review* 101 (1), 173–185
- / K. S. Gleditsch (2009): Introduction to special issue on “disaggregating civil war”, in: *Journal of Conflict Resolution* 53 (1), 487–495
- / S. Hug / L. F. Krebs (2010): Democratization and civil war : empirical evidence, in: *Journal of Peace Research* 47 (4), 377–394
- Center for International Cooperation and Security (2008a): Disarmament, demobilisation and reintegration (DDR) and human security in Cambodia, Bradford: University of Bradford
- (2008b): Disarmament, demobilisation and reintegration (DDR) and human security in Angola, Bradford: University of Bradford
- Children in Armed Conflict Unit (2004): Reintegrating child soldiers in DR Congo : fears for the girls; online: [http://www.essex.ac.uk/armedcon/story\\_id/000184.html](http://www.essex.ac.uk/armedcon/story_id/000184.html) (accessed 2 July 2012)
- Coalition to Stop the Use of Child Soldiers (2008): Child soldier global report; online: <http://www.childsoldiersglobalreport.org/> (accessed 2 July 2012)
- Colletta, N. J. / M. Kostner / I. Wiederhof (1996): Case studies in war-to-peace transition: the demobilization and reintegration of ex-combatants in Ethiopia, Namibia, and Uganda, Washington, DC: The World Bank
- / M. L. Cullen (2000): Violent conflict and the transformation of social capital : lessons from Cambodia, Rwanda, Guatemala, and Somalia, Washington, DC: The World Bank
- Collier, P. (2007): The bottom billion : why the poorest countries are failing and what can be done about it, Oxford: Oxford University Press
- / A. Hoeffler (1998): On economic causes of civil war, in: *Oxford Economic Papers* 50 (4), 563–573
- / – (2002): Aid, policy, and growth in post-conflict societies, Washington, DC: The World Bank (Policy Research Working Paper 2902)
- / – (2004): Greed and grievance in civil war, in: *Oxford Economic Papers* 56 (4), 563–595
- / – (2007): Unintended consequences: does aid promote arms races?, in: *Oxford Bulletin of Economics and Statistics* 69 (1), 1–27
- Costa, D. L. / M. E. Kahn (2010): Health, wartime stress, and unit cohesion : evidence from Union Army Veterans, in: *Demography* 47 (1), 45–66

## When do disarmament, demobilisation and reintegration programmes succeed?

- Cox, D. (1996): Peacekeeping and disarmament : peace agreements, Security Council mandates and the disarmament experience, in: United Nations Institute for Disarmament Research (ed.), *Managing arms in peace processes: the issues*, Geneva: United Nations, 83–134
- Crombach, A. et al. (2011): Social status and the desire to resort to violence : a study on former child soldiers of Uganda, mimeo
- Dahl Thruelsen, P. (2006): From soldier to civilian: disarmament demobilisation reintegration in Afghanistan, Copenhagen: Danish Institute for International Studies (DIIS Report 7)
- Darby, J. / R. McGinty (2000): *The management of peace processes*, Basingstroke: Macmillan Press
- de Watteville, N. (2002): Addressing gender issues in demobilization and reintegration programs, Washington, DC: The World Bank (Africa Region Working Paper 22)
- Deininger, K. (2003): Causes and consequences of civil strife : micro-level evidence from Uganda, in: *Oxford Economic Papers* 55 (4), 579–606
- Dercon, S. / D. Ayale (1998): Where have all the soldiers gone? Demobilization and reintegration in Ethiopia, in: *World Development* 26 (9), 1661–1675
- Diamond, D. M. / N. M. Weinberger (1989): Role of context in the expression of learning-induced plasticity of single neurons in auditory cortex, in: *Behavioral Neuroscience* 103 (3), 471–494
- Dickson-Gomez, J. (2002): Growing up in guerrilla camps : the long-term impact of being a child soldier in El Salvador's civil war, in: *Ethos* 30 (4), 327–356
- Dzinesa, G. (2008): The role of ex-combatants and veterans in violence in transitional societies, draft paper for the Violence and Transition Project Roundtable, 7–9 May 2008, Johannesburg, South Africa
- Dixon, W. J. (1994): Democracy and the peaceful settlement of international conflict, in: *American Political Science Association* 88 (1), 14–32
- Doucouliaagos, H. / M. Paldam (2009): The aid effectiveness literature: the sad results of 40 years of research, in: *Journal of Economic Surveys* 23 (3), 433–461
- Doyle, M. W. / N. Sambanis (2000): International peacebuilding: a theoretical and quantitative analysis, in: *The American Political Science Review* 94 (4), 779–801
- Dubey, A. (2002): Domestic institutions and the duration of civil war settlements: paper presented at the annual meeting of the International Studies Association, 24–27 March 2002, New Orleans, USA
- Eck, K. / L. Hultman (2007): One-sided violence against civilians in war : insights from new fatality data, in: *Journal of Peace Research* 44 (2), 233–246
- Elbadawi, I. / H. Hegre (2008): Globalization, economic shocks, and armed conflict, in: *Defense and Peace Economics* 19 (1), 37–60
- Elbert, T. et al. (2006): The influence of organized violence and terror on brain and mind – a co-constructive perspective, in: P. B. Baltes et al. (eds.), *Lifespan development and the brain*, Cambridge: Cambridge University Press
- / R. Weierstall / M. Schauer (2010): Fascination violence: on mind and brain of man hunters, in: *European Archives of Psychiatry and Clinical Neuroscience* 260 (2), 100–105
- Engen, R. (2008): Killing for their country : a new look at “Killogy.”, in: *Canadian Military Journal* 9, 120–128
- Erikson, R. S. / L. Stoker (2011): Caught in the draft : the effects of Vietnam draft lottery status on political attitudes, in: *American Political Science Review* 105 (2), 221–237
- Fearon, J. D. (1995): Rationalist explanations for war, in: *International Organization* 49 (3), 379–414
- (2003): Ethnic and cultural diversity by country, in: *Journal of Economic Growth* 8 (2), 195–222
- (2008): Economic development, insurgency, and civil war, in: E. Helpman (ed.), *Institutions and economic performance*, Cambridge, Mass.: Harvard University Press
- / D. D. Laitin (2003): Ethnicity, insurgency, and civil war, in: *American Political Science Review* 97 (1), 75–90
- Fjelde, H. / L. Hultman (2010): Weakening your enemy : constituencies and the location of violence against civilians in Africa, 1989–2006: paper prepared for presentation at the SGIR 7th Pan-European International Relations Conference, 9–11 September 2010, Stockholm

- Fortna, V. P. (2004): Does peacekeeping keep peace? International intervention and the duration of peace after civil war, in: *International Studies Quarterly* 48 (2), 269–292
- Freeman, T. W. / V. Roca / T. Kimbrell (2003): A survey of gun collection and use among three groups of veteran patients admitted to veterans affairs hospital treatment programs, in: *Southern Medical Journal* 96 (3), 240–243
- Gates, S. (2002): Recruitment and allegiance: the microfoundations of rebellion, in: *Journal of Conflict Resolution* 46 (1), 111–130
- Gear, S. (2002): Wishing us away: challenges facing ex-combatants in the ‘new’ South Africa (Violence and Transition series); online: [http://www.sasoldier.com/data/06\\_sadflinks/UsedPDFs/Wishing\\_Us\\_Away\\_%20Challenges\\_facing\\_ex-combatants\\_in\\_the\\_New\\_South\\_Africa.pdf](http://www.sasoldier.com/data/06_sadflinks/UsedPDFs/Wishing_Us_Away_%20Challenges_facing_ex-combatants_in_the_New_South_Africa.pdf)
- Geen, R. G. (2001): *Human Aggression*, 2nd ed., Philadelphia: Open University Press
- Gelman, A. (2005): *Multilevel (hierarchical) modeling : what it can and can’t do*, New York: Department of Statistics and Department of Political Science, Columbia University
- Gettleman, J. (2007): Rape epidemic raises trauma of Congo War, in: *New York Times* 7 Oct. 2007; online: <http://www.nytimes.com/2007/10/07/world/africa/07congo.html?pagewanted=all> (accessed 2 July 2012)
- Gibson, J. T. / M. Haritos-Fatouros (1986): The education of a torturer, in: *Psychology Today* 20, 50–56
- Gilligan, M. / S. J. Stedman (2003): Where do the peacekeepers go?, in: *International Studies Review* 5 (4), 37–54
- Ginifer, J. (2003): Reintegration of ex-combatants, in: M. Malan et al. (eds.), *Sierra Leone: building the road to recovery*, Pretoria: Coke Institute for Security Studies
- Giustozzi, A. (2012): Afghanistan : ‘Chaotic’ peacekeeping and ddr, in: in: Giustozzi, A. (eds.) : *Post-conflict disarmament, demobilization and reintegration. Bringing state-building back in*. Surrey: Ashgate
- Glassmyer, K. / N. Sambanis (2008): Rebel-military integration and civil war termination, in: *Journal of Peace Research* 45 (3), 365–384
- Gleditsch, N. P. et al. (2002): Armed conflict 1946–2001 : a new dataset, in: *Journal of Peace Research* 39 (5), 615–637
- Global Security* (2012): Somalia civil war; online: <http://www.globalsecurity.org/military/world/war/somalia.htm> (accessed 5 July 2012)
- Goldstein, J. S. / J. C. Pevehouse (1997): Reciprocity, bullying, and international cooperation : time-series analysis of the Bosnia conflict, in: *The American Political Science Review* 91 (3), 515–529
- Grossman, D. (1995): *On killing : the psychological cost of learning to kill in war and society*, New York: Back Bay Books
- Grossman, H. I. (1991): A general equilibrium model of insurrections, in: *The American Economic Review* 81 (4), 912–921
- Gurr, T. R. (1994): Peoples against states : ethno-political conflict and the changing world system : 1994 presidential address, in: *International Studies Quarterly* 38 (3), 347–377
- / W. H. Moore (1997): Ethno-political rebellion : a cross-sectional analysis of the 1980s with risk assessments for the 1990s, in: *American Journal of Political Science* 41 (4), 1079–1103
- Haavelmo, T. (1954): *A study in the theory of economic evolution*, Amsterdam: North-Holland
- Haer, R. / L. Banholzer / V. Ertl (2011): Creating compliance and cohesion – how rebel organizations manage to survive, in: *Small Wars and Insurgencies* 22 (3), 415–434
- Hagelstein, R. (2007): Where and when does violence pay off? The Algerian civil war (HiCN Working Paper 43); online: <http://www.hicn.org/wordpress/wp-content/uploads/2012/06/wp43.pdf> (accessed 5 January 2013)
- Handson, S. (2007): Disarmament, demobilization, and reintegration (DDR) in Africa; online: <http://www.cfr.org/publication/12650/> (accessed 4 July 2010)
- Hansen, H. / F. Tarp (2000): Policy arena aid effectiveness disputed, in: *Journal of International Development* 12 (3), 375–398

When do disarmament, demobilisation and reintegration programmes succeed?

- Harbom, L. / S. Högbladh / P. Wallenstee (2006): Armed conflict and peace agreements, in: *Journal of Peace Research* 43 (5), 623–635
- Harff, B. (2003): No lessons learned from the holocaust? : assessing risks of genocide and political mass murder since 1955, in: *American Political Science Review* 97 (1), 57–73
- Hartzell C. / M. Hoddie (2003): Institutionalizing peace : power sharing and post-civil war conflict management, in: *American Journal of Political Science* 47 (2), 318–332
- / – / D. Rothchild (2001): Stabilizing the peace after civil war: an investigation of some key variables, in: *International Organization* 55 (1), 183–208
- Hazen, J. M. (2005): Social integration of ex-combatants after civil war; online: <http://www.un.org/esa/socdev/sib/egm/paper/Jennifer%20Hazen.pdf> (accessed 4 July 2012)
- Hecker, T. et al. (2012): Appetitive aggression in former combatants – Derived from the ongoing conflict in DR Congo, in: *International Journal of Law and Psychiatry* 35 (3), 244–249
- Hegre, H. et al. (2001): Toward a democratic civil peace? Democracy, political change and civil war 1816–1992, in: *American Political Science Review* 95 (1), 33–48
- / N. Sambanis (2006): Sensitivity analysis of empirical results on civil war onset, in: *Journal of Conflict Resolution* 50 (4), 508–535
- Hofmann, T. / L. M. Schaffer (2009): Einmal Frieden und zurück? Friedensmissionen und die wiederkehrende Eskalation innerstaatlicher Gewalt, in: M. Bussmann / A. Hasenclever / G. Schneider (Hrsg.), *Identität, Institutionen und Ökonomie : Ursachen innenpolitischer Gewalt* (Politische Vierteljahresschrift Sonderheft 43)
- Hultman, L. (2010): Keeping peace or spurring violence? Unintended effects of peace operations on violence against civilians, in: *Civil Wars* 12 (1–2), 29–46
- Human Rights Watch* (1999): Democratic Republic of Congo: casualties of war: civilians, rule of law, and democratic freedoms; online: <http://www.unhcr.org/refworld/docid/3ae6a7f64.html> (accessed 8 July 2012)
- (2009): *Soldiers who rape, commanders who condone : sexual violence and military reform in the Democratic Republic of Congo*, New York
- Human Security Report Project* (2010): *Human security report 2009/2010: the causes of peace and the shrinking costs of war*, New York: Oxford University Press
- Humphreys, M. / J. M. Weinstein (2004): What the fighters say : a survey of ex-combatants in Sierra Leone: June–August 2003 (Interim Report); online: [http://www.columbia.edu/~mh2245/Report1\\_BW.pdf](http://www.columbia.edu/~mh2245/Report1_BW.pdf) (accessed 6 January 2014)
- / – (2007): Demobilization and reintegration, in: *Journal of Conflict Resolution* 51 (4), 531–567
- / – (2008): Community driven reconstruction in the Democratic Republic of Congo (Baseline Report); online: <http://www.columbia.edu/~mh2245/DRC/report.pdf> (accessed 4 July 2012)
- International Crisis Group* (2003): The Kivus: the forgotten crucible of the Congo conflict (*Africa Report* 56); online: <http://www.crisisgroup.org/en/regions/africa/central-africa/dr-congo/056-the-kivus-the-forgotten-crucible-of-the-congo-conflict.aspx> (accessed 5 July 2012)
- International Peace Academy* (2002): *A framework for lasting disarmament, and reintegration of former combatants in crisis situations*, New York: International Peace Academy (IPA Workshop Report)
- Jennings, K. M. (2007): The struggle to satisfy : DDR through the eyes of ex-combatants in Liberia, in: *International Peacekeeping* 14 (2), 204–218
- Jensen, P. S. / K. S. Gleditsch (2009): Rain, growth, and civil war : the importance of location, in: *Defence and Peace Economics* 20 (5), 359–372
- Justino, P. (2009): Poverty and violent conflict : a micro-level perspective on the causes and duration of warfare, in: *Journal of Peace Research* 46 (3), 315–333
- (2010): War and poverty (MICROCON Research Working Paper 32); online: [http://www.microconflict.eu/publications/RWP32\\_PJ.pdf](http://www.microconflict.eu/publications/RWP32_PJ.pdf) (accessed 6 January 2013)
- Kalyvas, S. N. (2008): Promises and pitfalls of an emerging research program : the microdynamics of civil war, in: S. N. Kalyvas / I. Shapiro / T. Masoud (eds.), *Order, conflict and violence*, Cambridge: Cambridge University Press

- / M. A. Kocher (2007): Ethnic cleavages and irregular war : Iraq and Vietnam, in: *Politics and Society* 35 (2), 183–223
- Karunakara, U. et al. (2004): Traumatic events and symptoms of post-traumatic stress disorder amongst Sudanese nationals, refugees and Ugandan nationals in the West Nile, in: *African Health Sciences* 4 (2), 83–93
- King, J. (2000): Too little, too late: the demobilization dilemma in Bosnia-Herzegovina, in: N. Pauwels (ed.), *War force to work force : global perspectives on demobilization and reintegration*, Baden-Baden: Nomos Verlagsgesellschaft, 329–333
- Kingma, K. (1997): Post-war demobilization and the reintegration of ex-combatants into civilian life : paper presented at the USAID conference Promoting Democracy, Human Rights, and Reintegration in Post-conflict Societies, 30–31 October 1997, Washington, DC
- (1999): Post-war demobilization, reintegration and peace-building : paper presented at the international conference and expert group meeting “The Contribution of Disarmament and Conversion to Conflict Prevention and its Relevance for Development Cooperation”, 30–31 August 1999, Bonn
- / K. Grebrewold (1998): *Demilitarisation, reintegration and conflict prevention in the Horn of Africa*, Bonn: Bonn International Center for Conversion
- Knight, A. W. (2008): Disarmament, demobilization, and reintegration and post-conflict peacebuilding in Africa : an overview, in: *African Security* 1 (1), 25–52
- Knight, M. / A. Özerdem (2004): Guns, camps and cash : disarmament, demobilization and reinsertion of former combatants in transitions from war to peace, in: *Journal of Peace Research* 41 (4), 499–516
- Krain, M. (2005): International intervention and the severity of genocides and politicides, in: *International Studies Quarterly* 49 (3), 363–387
- Kreutz, J. (2010): How and when armed conflicts end : introducing the UCDP conflict termination dataset, in: *Journal of Peace Research* 47 (2), 243–250
- Lamb, G. (2008): *Current approaches to disarmament, demobilisation and reintegration (DDR) programme design and implementation*, Bradford: Center for International Cooperation and Security, University of Bradford
- Laurance, E. J. / W. H. Godnick (2001): *Weapons collection in central America : El Salvador and Guatemala*, in: S. Faltas / J. Di Chiaro (eds.): *Managing the remnants of war : micro-disarmament as an element of peace-building*, Baden-Baden: Nomos Verlagsgesellschaft
- Lichbach, M. (1995): *The rebel’s dilemma*, Ann Arbor, Mich.: University of Michigan Press
- Licklider, R. (1995): The consequences of negotiated settlements in civil wars, 1945–1993, in: *The American Political Science Review* 89 (3), 681–690
- Maedl, A. (2011): Rape as weapon of war in the eastern DRC? The victims’ perspective, in: *Human Rights Quarterly* 33 (1), 128–147
- et al. (2010): Psychological rehabilitation of ex-combatants in non-western, post-conflict settings, in: E. Martz (ed.), *Trauma rehabilitation after war and conflict : community and individual perspectives*, New York: Springer, 177–214
- / H. Roos / M. Odenwald (2011): Using micro-level data to explore state failure : the example of Somalia, in: *Civil Wars* 13 (1), 61–79
- Mansfield, E. / J. Snyder (2005): *Electing to fight : why emerging democracies go to war*, Cambridge, Mass.: MIT Press
- Mason, D. / J. Weingarten / P. Fett (1999): Win, lose, or draw : predicting the outcome of civil wars, in: *Political Research Quarterly* 52 (2), 239–268
- Matveeva, A. (2012): *Tajikistan: DDR in the context of authoritarian peace*, in: Antonio Giustozzi (ed.), *DDR bringing the state back in*, Farnham: Ashgate Publishing
- McKay, S. / D. Mazurana (2004): *Where are the girls? Girls in fighting forces in Northern Uganda, Sierra Leone and Mozambique: their lives during and after war*, Montreal: International Centre for Human Rights and Democracy Development
- MDRP (*Multi-Country Demobilization and Reintegration Program*) (2006): Elisabeth Schauer, Director of Vivo, speaks about psycho-social support for ex-combatants; online: [http://www.mdrp.org/PDFs/N&N\\_12\\_07.pdf](http://www.mdrp.org/PDFs/N&N_12_07.pdf) (accessed 5 July 2012)

## When do disarmament, demobilisation and reintegration programmes succeed?

- Medecins Sans Frontières* (2002): International activity report 2002 Somalia; online: <http://www.doctorswithoutborders.org/publications/ar/report.cfm?id=1185> (accessed 5 July 2012)
- Melander, E. (2009): Selected to go where murderers lurk? : the preventive effect of peacekeeping, in: *Conflict Management and Peace Science* 26 (4), 389–406
- Menon, G. / A. Arganese (2007): Role of education and the demobilization of child soldiers : aspects of an appropriate education program for child soldiers (USAid *Issue Paper 2*); online: [http://pdf.usaid.gov/pdf\\_docs/PNADI663.pdf](http://pdf.usaid.gov/pdf_docs/PNADI663.pdf) (accessed 5 July 2012)
- Miguel, E. / S. Satyanath (2011): Re-examining economic shocks and civil conflict, in: *American Economic Journal: Applied Economics* 3 (4), 228–232
- / – / Ernest Sergenti (2004): Economic shocks and civil conflict : an instrumental variables approach, in: *Journal of Political Economy* 112 (4), 725–753
- Mill, J. S. (1998 [1848]): Principles of political economy, Oxford: Oxford University Press
- Mogapi, N. (2004): Reintegration of soldiers: the missing piece, in: *Intervention* 2 (3), 221–225
- Murdoch, J. / T. Sandler (2004): Civil wars and economic growth : spatial dispersion, in: *American Journal of Political Science* 48 (1), 138–151
- Murdock, H. (2011): Child soldiers in Congo live in fear and loathing, in: *The Washington Times* 19 April 2011; online: <http://www.washingtontimes.com/news/2011/apr/19/child-soldiers-in-congo-live-in-fear-and-loathing/?page=all> (accessed 5 July 2012)
- Mukherjee, B. (2006): Does third-party enforcement or domestic institutions promote enduring peace after civil wars? Policy lessons from an empirical test, in: *Foreign Policy Analysis* 2 (4), 404–430
- Murshed, S. M. / S. Gates (2005): Spatial-horizontal inequality and the Maoist insurgency in Nepal, in: *Review of Development Economics* 9 (1), 121–134
- Nell, V. (2006): Cruelty's rewards: the gratifications of perpetrators and spectators, in: *Behavioral and Brain Sciences* 29 (3), 211–257
- Nelson, R. J. / B. C. Trainor (2007): Neural mechanisms of aggression, in: *Nature Reviews Neuroscience* 8, 536–546
- Neuner, F. et al. (2002): A narrative exposure treatment as intervention in a Macedonia's refugee camp : a case report, in: *Journal of Behavioural and Cognitive Psychotherapy* 30 (2), 205–209
- Njata, J. (2012): Former child soldiers enthral drama enthusiasts, in: *The New Times* 30 April 2012; online: <http://www.newtimes.co.rw/news/index.php?i=14978&a=53045> (accessed 5 July 2012)
- Norwegian Refugee Council (2011): Homepage; online: <http://www.nrc.no/?did=9552913> (accessed 5 July 2012)
- Odenwald, M. et al. (2005): Khat use as risk factor for psychotic disorders : a cross-sectional and case-control study in Somalia, in: *BMC Medicine* 3 (5); online: <http://www.biomedcentral.com/1741-7015/3/5> (accessed 6 January 2014)
- et al. (2007): Screening for posttraumatic stress disorder among Somali ex-combatants : a validation study, in: *Conflict and Health* 1 (10); online: <http://www.conflictandhealth.com/content/1/1/10> (accessed 6 January 2014)
- / B. Lingenfelder / W. Peschel (2008): Psychotic disorder, Khat abuse and aggressive behavior in Somalia : a case report, in: *African Journal of Drug & Alcohol Studies* 7 (1), 59–63
- et al. (2009): Use of Khat and posttraumatic stress disorder as risk factors for psychotic symptoms : a study of Somali combatants, in: *Social Science and Medicine* 69 (7), 1040–1048
- Olsson, O. / H. C. Fors (2004): Congo: the prize of predation, in: *Journal of Peace Research* 41 (3), 321–336
- Oyefusi, A. (2008): Oil and the probability of rebel participation among youths in the Niger delta of Nigeria, in: *Journal of Peace Research* 45 (4), 539–555
- Paris, R. (2001): Human security : paradigm shift or hot air?, in: *International Security* 26 (2), 87–102
- Peake, G. (2008): What the veterans say: unpacking disarmament, demobilisation and reintegration (DDR) programmes in Timor-Leste, Bradford: Center for International Cooperation and Security, University of Bradford

- Pfeiffer, A. / T. Elbert (2011): PTSD, depression and anxiety among former abductees in northern Uganda, in: *Conflict and Health* 5 (14); online: <http://www.conflictandhealth.com/content/5/1/14> (accessed 6 January 2014)
- Pham, P. N. / P. Vinck / E. Stover (2009): Returning home : forced conscription, reintegration, and mental health status of former abductees of the Lord's Resistance Army in northern Uganda, in: *BMC Psychiatry* 9 (23); online: <http://www.biomedcentral.com/1471-244X/9/23> (accessed 6 January 2014)
- Pietz, T. (2004): Demobilization and reintegration of former soldiers in post-war Bosnia and Herzegovina : an assessment of external assistance, Hamburg: Institut für Friedensforschung und Sicherheitspolitik
- Prigerson H. G. / P. K. Maciejewski / R. A. Rosenheck (2001): Combat trauma: trauma with highest risk of delayed onset and unresolved posttraumatic stress disorder symptoms, unemployment, and abuse among men, in: *The Journal of Nervous and Mental Disease* 189 (2), 99–108
- Prunier, G. (2009): Africa's world war, Oxford: Oxford University Press
- Pugel, J. (2007): What the fighters say: a survey of ex-combatants in Liberia February-March 2006 : a UNDP-funded empirical study conducted in partnership with the African Network for the Prevention and Protection against Child Abuse and Neglect (ANPPCAN); online: [http://mirror.undp.org/liberia\\_new/UNDPwhatFightersSayLiberia\\_Finalv3.pdf](http://mirror.undp.org/liberia_new/UNDPwhatFightersSayLiberia_Finalv3.pdf) (accessed 6 January 2014)
- Quinn, J. M. / D. T. Mason / M. Gurses (2007): Sustaining the peace : determinants of civil war recurrence, in: *International Interactions* 33 (2), 167–194
- Raleigh, C. / H. Hegre (2009): Population, size, and civil war : a geographically disaggregated analysis, in: *Political Geography* 28 (4), 224–238
- Restrepo, J. A. / M. Spagat / J. F. Vargas (2006): The severity of the Colombian conflict : cross-country datasets versus new micro-data, in: *Journal of Peace Research* 43 (1), 99–115
- Richards, J. (2013): Demobilization in the DRC armed groups and the role of organizational control (Armed Actors Issue Brief 1); online: <http://www.smallarmssurvey.org/fileadmin/docs/G-Issue-briefs/SAS-AA-IB1-DDR-in-the-DRC.pdf> (accessed 6 January 2013)
- Rolston, B. (2007): Demobilization and reintegration of ex-combatants : the Irish case in international perspective, in: *Social Legal Studies* 16 (2), 259–280
- Sambanis, N. (2004): Using case studies to expand economic models of civil war, in: *Perspectives on Politics* 2 (2), 259–279
- Sanz, E. (2009): Eritrea : demobilization and reintegration, 2002–present, in: A. Caramés / E. Sanz (eds.), Analysis of disarmament, demobilization and reintegration (DDR) programmes in the world during 2008, Bellaterra: School for a Culture of Peace
- (2009): Uganda : amnesty act, 2000–2008, in: A. Caramés / E. Sanz (eds.), Analysis of disarmament, demobilization and reintegration (DDR) programmes in the world during 2008, Bellaterra: School for a Culture of Peace
- Savoca E. / R. Rosenheck (2000): The civilian labor market experiences of Vietnam-era veterans: the influence of psychiatric disorders, in: *The Journal of Mental Health Policy and Economics* 3 (4), 199–207
- Schaal, S. / T. Elbert (2006): Ten years after the genocide: trauma confrontation and posttraumatic stress in Rwandan adolescents, in: *Journal of Traumatic Stress* 19 (1), 95–105
- Schafer, Jessica (1998): A baby who does not cry will not be suckled : AMODEG and the Reintegration of Demobilised Soldiers, in: *Journal of Southern African Studies* 24(1), 207–22
- Schauer, E. / T. Elbert (2010): The psychological impact of child soldiering, in: E. Martz (ed.), Trauma rehabilitation after war and conflict, New York: Springer Science & Business Media
- Schneider, G. (2010): Economics and conflict, in: R. A. Denemark (ed.), The international studies encyclopedia, Oxford: Wiley-Blackwell; online: <http://kops.ub.uni-konstanz.de/handle/urn:nbn:de:bsz:352-opus-108720> (accessed 6 January 2014)
- / N. Wiesehomeier (2008): Rules that matter: political institutions and the diversity-conflict nexus, in: *Journal of Peace Research* 45 (2), 183–203
- / L. Banholzer / R. Haer (2011): Cain's choice: causes of one-sided violence against civilians, in: T. G. Jakobsen (ed.), Causes of war: an introduction to theories behind warfare and collective violence, New York: Nova Science Publishers, 57–82

## When do disarmament, demobilisation and reintegration programmes succeed?

- / L. Banholzer / L. Albarracin (forthcoming): Ordered rape : a principal-agent analysis of wartime sexual violence in the DR Congo. *Violence Against Women*
- / M. Bussmann / C. Ruhe (2012): The dynamics of mass killings: testing time-series models of one-sided violence in the Bosnian civil war, in: *International Interactions: Empirical and Theoretical Research in International Relations* 38 (4), 443–461
- Schuller, T. / J. Field (1998): Social capital, human capital and the learning society, in: *International Journal of Lifelong Education* 17 (4), 226–235
- Shaw, B. D. (1984): Bandits in the Roman Empire, in: *Past and Present* 105, 3–52
- SIDDR (Stockholm Initiative on Disarmament Demobilisation Reintegration) (2006): Final report; online: <http://www.sweden.gov.se/content/1/c6/06/43/56/cf5d851b.pdf> (accessed 5 July 2012)
- Singer, D. J. (1960): International conflict : three levels of analysis, in: *World Politics* 12 (3), 453–461
- Skinner, E. P. (1999): Child soldiers in Africa : a disaster for future families, in: *International Journal on World Peace* 16 (2), 7–22
- Smyth, M. (2010): The process of demilitarization and the reversibility of the peace process in Northern Ireland, in: *Terrorism and Political Violence* 16 (3), 544–566
- Snyder, J. J. / G. R. Patterson (1995): Individual differences in social aggression : a test of a reinforcement model of socialization in the natural environment, in: *Behavior Therapy* 26 (2), 371–391
- Somasundaram, D. (1998): Scarred minds : the psychological impact of war on Sri Lankan Tamils, London: Sage
- Specht, I. (2000): Jobs for demobilised rebels & soldiers : early preparedness and sustaining capacities; online: <http://ilo-mirror.library.cornell.edu/public/english/employment/recon/crisis/download/rebels.pdf> (accessed 5 July 2012)
- Stedman, S. J. / D. Rothchild / E. M. Cousens (2002): Ending civil wars : the implementation of peace agreements, Boulder, Colo.: Lynne Rienner Publishers
- Stigler, G. J. (1955): The nature and role of originality in scientific progress, in: *Economica* 22 (88), 293–302
- Striuli, L. (2012): DDR in Mosambique : a success without the first “d”, in: Giustozzi, A. (eds.): Post-conflict disarmament, demobilization and reintegration. Bringing state-building back in. Surrey: Ashgate
- Tanner, F. (1996): Consensual versus coercive disarmament, in: United Nations Institute for Disarmament Research (ed.), *Managing arms in peace processes: the issues*, Geneva: United Nations, 169–204
- Tarrant, M. et al. (2001): Social identity in adolescence, in: *Journal of Adolescence* 24 (5), 597–609
- Teicher, M. H. et al. (2002): Developmental neurobiology of childhood stress and trauma, in: *Psychiatric Clinics of North America* 25 (2), 397–426
- The Economist (2008): The UN and humanitarian intervention to protect sovereignty, or to protect lives?, in: *The Economist* 15 May 2008; online: <http://www.economist.com/node/11376531> (accessed 5 July 2012)
- The International Rescue Committee (2008): Mortality in the Democratic Republic of Congo : an ongoing crisis; online: [http://www.theirc.org/resources/2007/2006-7\\_congomortalitysurvey.pdf](http://www.theirc.org/resources/2007/2006-7_congomortalitysurvey.pdf) (accessed 5 July 2012)
- Tish, J. (2011): Mayi-Mayi Sheka, FDLR-FOCA, and CNDP responsible for rapes and other crimes in DRC says UN Report, in: *AfroAmerica Network* 07 July 2011; online: <http://www.afroamerica.net/AfricaGL/2011/07/07/mayi-mayi-sheka-fdlr-foca-cndp-rapes-crimes-drc-un-report/> (accessed 18 May 2012)
- Toft, M. D. (2003): Peace through victory?, paper presented at the annual meeting of the American Political Science Association, 27–31 August 2003, Philadelphia
- Tull, D. M. (2003): A reconfiguration of political order? The state of the state in Northern Kivu (DR Congo), in: *African Affairs* 102, 429–446
- Tullock, G. (1971): The paradox of revolution, in: *Public Choice* 11 (1), 89–99
- UNICEF (2010): Surviving abduction in Uganda’s civil conflict; online: [http://www.unicef.org/infobycountry/uganda\\_27679.html](http://www.unicef.org/infobycountry/uganda_27679.html) (accessed 5 July 2012)

- UN (*United Nations*) (1999): Disarmament, demobilization and reintegration of ex-combatants in a peacekeeping environment : principles and guidelines : lessons learned, New York: United Nations Department of Peacekeeping Operations
- (2006): Post-conflict stabilization, peace-building and recovery frameworks; online: [http://www.unddr.org/iddrs/02/download/IDDRS\\_220.pdf](http://www.unddr.org/iddrs/02/download/IDDRS_220.pdf) (accessed 5 July 2013)
- (2010): What is DDR? Disarmament, demobilization and reintegration resource centre; online: <http://www.unddr.org/> (accessed 5 July 2012)
- (2011): Sierra Leone : United Nations disarmament, demobilization and reintegration resource centre; online: <http://www.unddr.org/countryprogrammes.php?c=60> (accessed 5 July 2012)
- Verhey, B. (2001): Child soldiers : preventing, demobilizing and reintegrating, Washington, DC: The World Bank (Africa Region Working Paper 23)
- Verwimp, P. / P. Justino / T. Brück (2009): The analysis of conflict : a micro-level perspective, in: *Journal of Peace Research* 46 (3), 307–314
- Vinck, P. et al. (2007): Exposure to war crimes and implications for peace building in Northern Uganda, in: *The Journal of the American Medical Association* 298 (5), 543–54
- Vitiello, B. / D. M. Stoff (1997): Subtypes of aggression and their relevance to child psychiatry, in: *Journal of the American Academy of Child & Adolescent Psychiatry* 36 (3), 307–315
- Wagner, R. H. (1993): The causes of peace, in: R. Licklider (ed.), *Stopping the killing: how civil wars end*, New York: New York University Press, 235–268
- Wakabi, W. (2008): Sexual violence increasing in Democratic Republic of Congo, in: *The Lancet* 371 (9606), 15–16
- Walter, B. (1997): The critical barrier to civil war settlement, in: *International Organization* 51 (3), 335–364
- (1999): Designing transitions from civil war, in: *International Security* 24 (1), 127–155
- (2004): Does conflict beget conflict? Explaining recurring civil war, in: *Journal of Peace Research* 41 (3), 371–388
- Weber, M. (2000 [1905]): *Die protestantische Ethik und der Geist des Kapitalismus*, Weinheim: Beltz Athenäum Verlag
- Weidmann, N. (2009): Kausalprozesse auf mehreren Ebenen: Ein Plädoyer für vertikale Integration in der Bürgerkriegsforschung, in: M. Bussmann / A. Hasenclever / G. Schneider (Hrsg.), *Identität, Institutionen und Ökonomie: Ursachen innenpolitischer Gewalt (Politische Vierteljahresschrift Sonderheft 43)*
- Weierstall, R. / T. Elbert (2011): The appetitive aggression scale : development of an instrument for the assessment of human's attraction to violence, in: *European Journal of Psychotraumatology* 2 (8430); online: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3402137/> (accessed 6 January 2013)
- et al. (2011a): When combat prevents PTSD symptoms : results from a survey with former child soldiers in Northern Uganda, in: *BMC Psychiatry* 12 (41); online: <http://www.biomedcentral.com/1471-244X/12/41> (accessed 6 January 2014)
- et al. (2011b): The thrill of being violent as an antidote to posttraumatic stress disorder in Rwandese genocide perpetrators, in: *European Journal of Psychotraumatology* 2 (6345); online: <http://www.ejpt.net/index.php/ejpt/article/view/6345> (accessed 6 January 2013)
- Weierstall, R. et al. (2013): Becoming cruel : Appetitive aggression released by detrimental socialisation in former Congolese soldiers. *International Journal of Behavioral Development* 0(0), 1–9
- Weinstein, J. M. (2005): Resource and the information problem in rebel recruitment, in: *Journal of Conflict Resolution* 49 (4), 598–624
- (2007): *Inside rebellion: the politics of insurgent violence*, Cambridge: Cambridge University Press
- Wiesehomeier, N. / G. Schneider / C.-S. Braun (2009): Die Vereinbarkeit des Unvereinbaren? Wirtschaft und Identität als gemeinsame Bürgerkriegsursachen, in: M. Bussmann / A. Hasenclever / G. Schneider (Hrsg.): *Identität, Institutionen und Ökonomie: Ursachen innenpolitischer Gewalt (Politische Vierteljahresschrift Sonderheft 43)*
- Williamson, J. (2006): The disarmament, demobilization and reintegration of child soldiers : social and psychological transformation in Sierra Leone, in: *Intervention* 4 (3), 185–205

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*World Bank* (2006): Cambodia – demobilization and reintegration project (Implementation completion and results report 36269); online: <http://documents.worldbank.org/curated/en/2006/05/6947493/cambodia-demobilization-reintegration-project> (accessed 6 January 2013)

– (2010): The multi-country demobilization and reintegration program final report overview of program achievements, Washington, DC: The World Bank



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