Who becomes a sicario and why?
A supply-side analysis of Mexican hitmen

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Ruy Alberto Valdés Benavides

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Members of the Examining Committee:

Arjun Bedi

Lorenzo Pellegrini

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Inquiries:

Postal address:

Institute of Social Studies
P.O. Box 29776
2502 LT The Hague
The Netherlands

Location:

Kortenaerkade 12
2518 AX The Hague
The Netherlands

Telephone: +31 70 426 0460
Fax: +31 70 426 0799

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"Quis custodiet ipsos custodes?"[a]

- Juvenal

[a] "Who will watch the watchmen?"

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List of Acronyms

BBC	British Broadcasting Corporation
CCSPJP	Council for Public Security, Citizen Advice and Criminal Justice [Mexico]
CNN	Cable News Network
IACHR	Inter-American Commission on Human Rights
INEE	National Institute for Education Evaluation [Mexico]
INEGI	National Institute of Statistics and Geography [Mexico]
OADPRS	Organism of Prevention and Social Rehabilitation [Mexico]
OAS	Organization of American States
OECD	Organisation for Economic Co-operation and Development
SEDENA	National Defence Secretary [Mexico]
SNSP	Executive Secretary of the System of Public National Security [Mexico]

Abstract

This work is the first attempt at developing a profile of Mexican sicarios. I develop a database of 33 sicarios that contains information regarding payments (wages and per hit), expected life and types of sicario, age, emotional traumas, and other variables. As a result of developing the database, I found that normally there are two types of sicarios in Mexico: (1) Direct sicarios, the ones that join directly to the cartel and (2) former officer sicarios (12 cases). The classification is necessary because they have essential differences regarding payments and the positions they occupy in the cartel. With the information in the database I estimate the returns to being a sicario and calculate the opportunity cost of joining a legitimate labour or be part of the military or the police. I find that the sicarios that join directly to the cartel most of the time will accumulate a total income that could be equalized or surpassed by the average Mexican labourer. The result shows that there is more than a rational decision-making for those who join voluntarily or by persuasion. Former officers show a higher economic rationale in their decision to become sicarios. In most cases they are able to earn a total income that an average policeman or soldier would never be able to reach during his active life. This could happen because they posses a more professional set of skills and tend to occupy high hierarchy ranks in the cartel. Additionally, I complimented the analysis with the review of the profile of inmates sentenced for first-degree murder.

Relevance to Development Studies

Sicarios have played a crucial role in the large growth of homicides in Mexico since 2006. Organizing the profile of this people will help to identify which variables motivate them to join organized crime or how do they get recruited in the case that this happens by force. Also, it is important to delineate the differences between sicarios with previous experience in the army or the police with the ones that join directly to the cartel; since they have essential differences in their profile. Most of the studies about Mexican violence focus on the murder rates and its relation with the socio-political environment in the country. Previous works usually undermine the factors that motivate criminals to engage in violent activities. The current Mexican violent era demands a broader understanding on how violent criminals engage in these activities. The work also gives insights on what facilitates cartels to hire this kind of labour. Additionally, it supports the conclusion in other criminal studies that violence cannot be addressed solely as an economic or geopolitical problem. It could also work for further policy recommendations. Violence prevention does not have to necessarily be a part of national development and poverty plans, as it is right now in Mexico. Advances have been achieved to reduce violence in poor and underdeveloped societies.

Keywords

Sicario, hitman, organized crime, cartel, violence, drug trafficking

1. Introduction

"The reason for turning down the path of loyalty to the Army was and is simple: the tasks entrusted by the general are not far from those required by the capos, but they pay better"

Statement based on protected witness "Karen" confession, Padgett (2012)

Since 2006 to date, there have been about 100,000 officially registered homicides related to organized crime in Mexico plus 26,000 disappearances (Molzahn et al., 2012 and Zuckerman, 2015, Malkin and Ahmed, 2015). The rate of homicides at the national level is relatively lower than in other Latin American countries. In 2012 Mexico had 22.2 homicides per 100,000 inhabitants while countries like Honduras had 85.5 or El Salvador had 35.7 (Igarapé Institute, 2015). However, at the regional level it is a different story. For instance, in 2010 Ciudad Juárez reached the highest homicide rate in the world with 273.4 homicides per 100,000 and Acapulco in 2013 occupied the third spot in the ranking with 143 (Igarapé Institute and CCSPJP, 2015). Around 80% of these murders are reported as executions, meaning predetermined murders as a result of internal and external conflicts that resulted from the current battle between different cartels (Valdés, 2013b).

The executions are usually made by hitmen hired by organized crime, better known as sicarios. They have different profiles and skills. Thousands of youngsters have been recruited in Ciudad Juárez and other cities in Mexico to work as sicarios for organized crime, they are better known as niños-sicarios (*kid-sicarios*). A lot of them do not survive. While there is no precise number on how many of the total victims are sicarios, the main reason of premature death in Mexico is homicide. In 2013, 10,000 young men and 3,795 women (15-29 years old) were killed by aggression in the country (INEGI 2015, cited in Reforma, 2015).

Soldiers and policemen also have served as sicarios during or after their jobs. A former officer becomes an asset for cartels to conduct its activities, not only because of their skills but also for intelligence, vigilance and access to weaponry. Mexican officers at the municipal, state and federal level have followed orders from the cartels to harm their rivals. Even their own commanders have send them to obtain confessions by engaging in kidnapping, forced disappearances, torture and, sometimes, executions. These practices have been criticized and documented by the Inter-American Commission on Human Rights (IACHR, 2015) and NGOs like Amnesty International (2014).

This work is the first attempt at developing a profile of Mexican sicarios. I develop a database of 33 sicarios that contains information regarding payments,

expected life and types of sicario; age, emotional traumas, and other variables. I rely on various sources of information. The data was taken from official confessions made to the federal police, interviews, books from experts in the subject, specialized sites in crime and security, journalistic sources and documentaries.

The main contribution of the database developed in this work is that it shows that it is necessary to separate the types of sicario in two: (1) Direct sicarios (21 cases), the ones that join directly to the cartel and (2) former officer sicarios (12 cases). The classification is necessary because they have essential differences regarding payments and the positions they occupy in the cartel.

With the information in the database I estimate the returns to being a sicario and calculate the opportunity cost of joining a legitimate labour or be part of the military or the police. The main objective of calculating the opportunity cost is to know until what extent the rational approach can explain the individual factors that influence a person to become a sicario. I find out that the sicarios that join directly to the cartel most of the time get returns that are lower or slightly higher than the average labourer with different levels of schooling. Former officers show a higher economic rationale in their decision to become sicarios, in a lot of cases they are able to earn a total income that an average policeman or soldier would have never be able to reach during his active life. This could happen because they posses a more professional set of skills and tend to occupy high hierarchy ranks in the cartel. I also complimented the analysis with the review of the profile of inmates sentenced for first-degree murder.

The present work does not intend to suggest that engaging in this type labour is mainly a product of a conscious and meditated individual choice. While there are cases of people that voluntarily or through non-coercive persuasion decide to join cartels, there are also many registered cases where this happens by force. Also, in both cases, sicarios report that once that they are in the cartel it is very hard to get out or change their activities. That being said, it is still relevant to estimate the returns to being a sicario. For instance, knowledge of payments and wages can help to detect the type of sicario and his hierarchy, also, it could be expected that wages and risks change depending on the time and place where the sicario mainly works.

The analysis is done understanding that violent labour is expected to rise as a consequence of other institutional and historical factors. In Mexico, there are thousands of sicarios because there is a conflict between major cartels that require armed squads to expand or defend their territories and trafficking routes. In more peaceful times, it would not be expected that people would easily be engaged in these activities.

The paper is organized in the following manner. In the next section I will describe the historical relation of sicarios with organized crime. Then, I will explain the literature review in the third section, followed by the theoretical

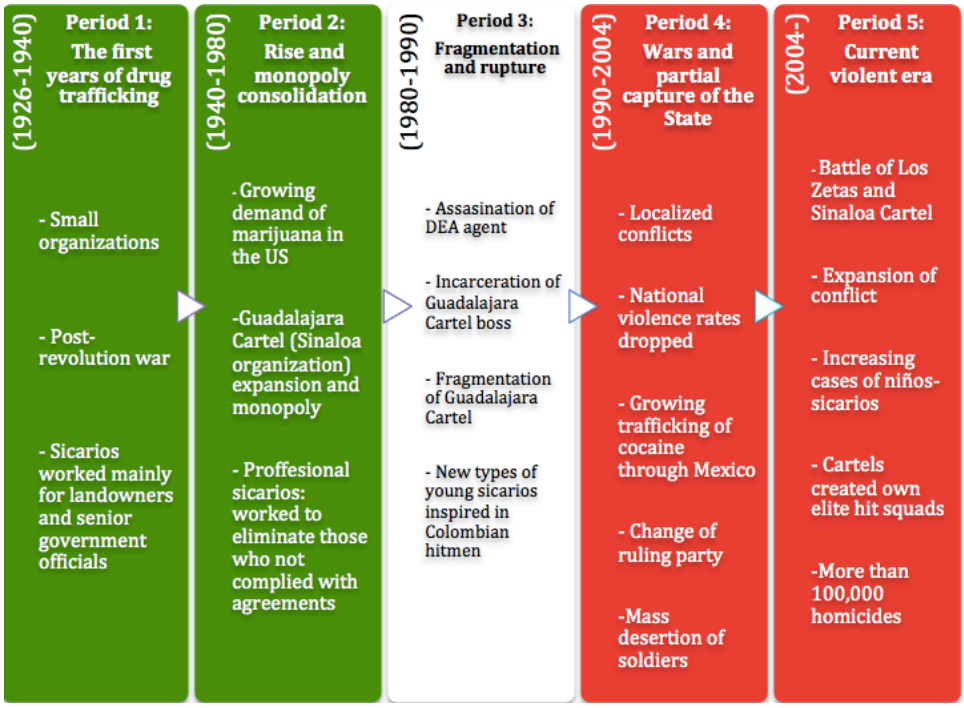
framework (fourth section). In the fifth section I will do three things: first, I will briefly analyse the profile of inmates sentenced for first degree murder in Mexico, then I will describe the database created for this paper and finally I will calculate the opportunity cost of being a sicario. In the sixth section I will conclude.

2. Sicarios and their historical relation with organized crime

> *"The bosses don´t let you leave because you know too much. When people try to get out, they can kill them. The only way out is to just disappear without saying anything"*
>
> Gustavo, Medellín sicario,
> Grillo (2012:160)

During the first years of drug trafficking in Mexico until the 80s, Sicarios were known as gatilleros (triggermen) (Grillo, 2012). "They were skilled professionals who carried on their trade into middle age, using pistols and dispatching their victims at close range, often in the dark of the night" (2012:154). For instance, Rodolfo Valdés, "The Gypsy" leader of The Dorados that were mainly hired by Sinaloa landowners to murder "uppity peasants in the 1940s" (2012:154). The Gypsy at least committed 50 murders and allegedly killed the Sinaloa governor at the time, Rodolfo Loaiza, because of his role in land expropriations (2012). There were also triggermen in Mexico City hired by "senior politicians and security officials" (2012:154) to commit high profile murders. For instance, José González who in his memoirs confesses to a similar number of killings as the Gypsy, he claims to have followed orders of the Mexico City police chief Arturo "Blackie" Durazo (2012:155). González had the common profile of the old hired assassins. "He had a university degree, did not start murdering until he was twenty-eight, and carried on killing into his fifties" (2012:155). González indicated the murder of his father in a bar fight as the spark that started him on his criminal path.

Figure 1. The five periods in the history of Mexican organized crime



Elaborated by the author (based on Valdes, 2013b and Grillo, 2012)

The first period of organized crime (1926-1940) was a time when the main trafficked drugs were marijuana and opium poppies. According to Valdés (2013b), there were some episodes of violence to gain control of different parts of the production chain. Being the most important one, the take over of the opium exportation business run by part of the Chinese community in Sinaloa, which resulted in a massacre of 11 Chinese. Law enforcement was also weak, specially, since the war of revolution had just ended and institutions of security and justice were just being organized. The governors of the trade routes established the links between organized crime and the authorities. "It was a two path road: politicians and policemen that organized their drug trafficking businesses and private drug dealers that paid for the state protection, without disregarding that some of them also became politicians" (2013b: 86). Additionally, the US pressured Mexico to adopt similar prohibition policies ending up in the change of the Addiction and the Criminal Code, to now treating addicts as criminals instead of sick, in the 1940s. At the time the organizations were made by "a) networks of small producers…b) multiplicity of urban networks of commercialization [gangs, small stores, police officers]…c) organizations dedicated specially to the exports of marijuana and opium to the US" (Valdés 2013b: 84-85).

The following period (1940-1980) was distinguished by the "rise and monopoly consolidation" of organized crime (Valdés, 2013b: 91). The general shape of the drug trafficking organizations of the time was the formal establishment of territories, where businesses were ran with complicity of the au-

thorities (2013b). In terms of violence, there were intermittent periods of peace and the conflicts were mainly for leadership or contracts (2013b). The exponential rise in the consumption of marijuana in the US increased the profitability of organized crime. During this time there was a concentration of drug trafficking into one monopoly mostly ran by Sinaloan bosses with base in Sinaloa and Guadalajara (which will later be known as The Guadalajara Cartel). There is no conclusive evidence on how this concentration was achieved. One of the main hypotheses is that, to meet the growing US demand, a trafficking business (collecting and export) that could handle large volumes of marijuana with presence in different Mexican states was needed (2013b). Especially in the states of the South, like Guerrero and Oaxaca, the business model of association with local caciques and negotiations with government officials led to deals without large-scale violence. For instance, the case of Rogaciano Alba, both a political cacique and major of Petatlán, he was the "operational manager of the organization of Sinaloa in the state of Guerrero" (2013b: 117). By the end of the 70s the Sinaloan organization expanded throughout the entire pacific coast (2013b). In Sinaloa, the settlement of the organization was more difficult. In 1969 the Chief of Police of Sinaloa was murdered, being the first high profile murder of the period. Another sounded case was the murder attempt of Mazatlán, Sinaloa local boss Manuel Salcido. Presumably, as revenge, Manuel hired three Federal policemen to kidnap six young men involved in the assault and they were later found "dismembered with machetes and burned" (Astorga, 2005: 11, cited in Valdés, 2013b: 118).

In the 1980s a new profile of Mexican hired assassins named sicarios was in the making. Mexico became a key point of trade of cocaine, a much profitable drug than poppies and marijuana, into the United States after the blocking of the Caribbean routes to the Colombian Cartels (Grillo, 2012). Mexican and Colombian drug lords started to create partnerships to transfer cocaine through Mexico. The recruitment of younger sicarios was inspired by the school of motorcycle assassins, started by Medellín Cartels in Colombia and led by Isaac Guttnan Esternberg. "He [Isaac] understood that alienated youth could be won by little more than a decent salary and sense of purpose" (2012:155). "You see your father sweating hard all day and just making a few pesos. And sometimes he was out of work for months. And then guys in the barrio working for the Office [cartel] are driving brand-new cars and motorcycles and have five girlfriends", stated Gustavo a Colombian Sicario (2012:157). His skills of shooting in the heart and the head of the victim while driving a motorcycle were honed by old sicario. His first kill was something that gave him "bad dreams" but then it became a custom and he lost count of all the hits he made (2012:158). He earned a $600 monthly wage and a bonus between $2,000-$4,000 per hit. "Some people murder because they get pleasure out of it, because they actually enjoy killing and get addicted to the blood. But I do it out of need" (2012:159). The Colombian sicarios were admired by Mexican druglords and hitmen. Mexican Cartel bosses started to "recruit young men

from the slums" (2012:161) and hitmen began to call themselves sicarios and adopt some of their techniques. "However, while Colombians used motorcycles Mexicans ambushed from Jeeps and SUVs. And while Colombians used pistols, Mexicans blasted with their beloved "goat horn" rifles [AK47]" (2012:161).

The turning point that set the basis of the current conflict between cartels happened in 1989. The redistribution of organized crime from the monopoly of the Guadalajara Cartel to disaggregated organizations distributed in different trafficking routes called plazas. The new map of Mexican cartels was motivated after the arrest of Miguel Ángel Félix Gallardo, former policeman and boss of the Guadalajara Cartel, because of his involvement in the assassination in 1985 of "Kiki" Camarena a DEA agent (Grillo, 2012). Gallardo directed from prison with, presumably, the support of the commander of the Federal Judicial Police Guillermo González Calderoni a "gangster summit" (2012:78). The reunion was held in Las Brisas hotel in Acapulco, Guerrero with the aim of deciding the future of organized crime. "Journalist Blancornelas broke the news about the meeting, and it was later confirmed by a number of sources" (2012:77). The compliance of high-ranked government and military officials is also mentioned in Aguilar (2015) and Saviano (2015). The intention was to have a decentralized and more efficient control of the pacts made by cartels and the involved government officials to prevent another violation to the relatively peaceful equilibrium (Valdés, 2013a). The main cartels that surged after the meeting were the Sinaloa, Tijuana, Juárez and Gulf cartel. All of the bosses had roots in the Sinaloan area and, even though they started to become more independent from each other, they maintain partnerships in some areas. "Different bosses moved round the Sinaloan Empire, chipping together on loads, sharing corrupt cops, and passing around operatives" (Grillo, 2012:78), Gonzalo, a former police officer and hitman, now murdered, confesses that he worked for different cartels during his life. DEA agents also were aware of these connections (2012).

The fall of the leaders of the most important Colombian Cartels between 1991-1995 and the seizure of 60% of Colombian cocaine shipments skyrocketed the price of cocaine in the US (Castillo et al., 2013 and NDIC, 2010 cited in Hope, 2011). Mexico trade routes became more profitable and the Mexican cartels started to fight for them. The main conflict was between the Sinaloa and the Tijuana cartel (Servitja, 2012 and Grillo, 2012). Mexican sicario "Drago", that worked during the mid 90s and early 2000s explains some of the fights of that period: "…during a shooting we used the traditional goat horns [AK47]. Even though these were bought in the US they were from Israeli manufacturing" (Reyna, 2011, Chapter 4). Drago started his criminal life while underage. "I never get to feel pleasure by killing. It was only a job…I killed because if I did not do it they would kick my ass" (2011:1797). He also states that most of the time a sicario do not know who are their victims. The effect of the first killing was also a turning point in Drago´s life "I was sixteen…For

a week I could not sleep, hearing the screams of the man that I killed that day…Even though it took me a while to assimilate it, at the end I accepted what I have done. And I changed. Today I can say that in that instant I became a man" (2011:851). Drago ended up as a lieutenant of his plaza, one of the highest hierarchies in the cartel. He received specialized training as an apprentice during his brief time in the state police and then received military training when he was in the cartel. "The sicarios and the cops went to the same school; the soldiers and the hitmen shared instructors and imitate their know-how and skills"(2011:41).

Regardless of the internal conflicts, for more than a decade, the country experienced a 50% decrease in homicide rates (1990-2007). But in this relatively peaceful time, there were indications that cartels were worried about their turf. For instance, between 1995 and 2012, 250,000 soldiers left the Mexican army some, presumably, to join the cartels (Morton, 2012). "Mexican special-force soldiers became mercenaries for gangsters. Businessmen who used to pay off corrupt officials had to pay off mobsters. Police forces turned on one another…"(Grillo, 2012:10). They were reports of direct attacks by hit squads (of sicarios) to journalists. For instance, the assassination of Victor Manuel Oropeza in 1991, a doctor that wrote an article linking the police and the drug world (Bowden, 2009). Also, the assassination attempt of Zeta newspaper editor Jesús Blancornelas in 1997, after criticizing the violence of the Tijuana Cartel, led by the Arellano Félix brothers (Grillo, 2012).

The new map of organized crime was not the only major change in Mexico. The ruling political party (PRI) hegemony started to weaken since the mid 80s. "This point is now recognized by most Mexican academics…the Mexican drug war is inextricably linked to the democratic transition" (Grillo, 2012:10). The rise and eventual transition of the opposition party, PAN, translated in a change of the way that cartels dealt with government institutions and a shift in their previous informal pacts (Aguilar, 2015).

There is no consensus on one main factor that may have led to escalation in violence; the phenomenon is better understood as a conjuncture of diverse events (Hope, 2013). According to Grillo (2012), the official break of the peace-equilibrium was the battle for turf between Los Zetas (that were still part of the Gulf Cartel) and the Sinaloa Cartel in 2004 at the border town of Nuevo Laredo, Tamaulipas. The rise of Los Zetas mainly came from a mass defection from different units of the Mexican (and some Guatemalan) army, especially elite squads from the Mexican Organism of Special Forces led by Arturo Guzmán Decena (GAFE) (2012:98). The latter is a crucial event to understand the increasing demand for hired assassins in times of conflict and the ability of cartels to persuade them to join their lines. Recruitment banners of the cartel were displayed "The Zetas operations group wants you, soldier or ex-soldier….We offer you a good salary, food, attention for your family. Don´t suffer hunger and abuse anymore …Join the ranks of the Gulf [cartel]. We of-

fer benefits, life insurance, a house for your family and children. Stop living in the slums and riding the bus. A new car or truck, your choice." (Grillo, 2012: 104-105).

The Zetas started to work as the elite armed forces of the Gulf Cartel and were allowed to create their own income by taxing, first, to people involved in the drug business and then to any kind of business. Later in 2008 they gradually split from the Gulf Cartel. The cartel expansion and its diversification from drug dealing to more violent activities such as kidnapping, human trafficking, extortion and selling protection gave pace to the growth of violent crime rates (Valdés 2013b, Aguilar, 2015). But the scale of violence cannot be attributed only to one group, the conflict between cartels have taken thousands of victims (Valdés, 2013b and Canales, 2013).

The brutality and effectiveness of the Zetas made that their partners wanted to learn from their operations and rival cartels tried to keep up with them by creating their own elite armed wings. "Gangsters throughout Mexico also copied the Zetas ´paramilitary way of organizing. Sinaloans created their own cells of combatants with heavy weaponry and combat fatigues" (Grillo, 2012:106). For instance, the current cartel New Generation serves as the specialized armed wing of the Sinaloa Cartel to battle for turf in Guadalajara against Los Zetas. What started in 2004 translated in more conflicts around the country (e.g. Michoacán, Guerrero, etc.). Also, branches of the old cartels separated from their bosses and create new independent organizations. For instance, La Familia Michoacana "first allied with the Zetas and trained with their commandos in urban warfare. But after they felt strong enough, they did a U-turn and started murdering Zetas to claim the territory [Michoacán] as their own" (2012: 197).

By now, both Los Zetas and La Familia main bosses have been apprehended and the cartels have been seriously weakened but this does not seem to decrease violence rates. "Decapitation was almost unheard of in modern Mexico…. By the end of 2006 there had been dozens of decapitations. Over the next year there were hundreds" (2012: 106). Human rights violations, massacres, brutality and disappearances, scaled without precedent. To name a few events: "A pair of grenades thrown at the crowd in Morelia while celebrating the independence day, taking 9 lives and 100 of injured people; 72 Central American migrants savagely executed in Tamaulipas for not paying an extortion of $2,000 pesos (120 USD); 52 people burned and intoxicated, most of them senior adults, in a Casino in Monterrey by criminals dedicated to extortion; 17 young men from a marginalized neighbourhood in Ciudad Juárez by AK47s…" (Valdés, 2013b: 12). More recently, the disappearance of 43 students in Ayotzinapa, Guerrero. The disappearances involved city police and the mayor, presumably, working for the local cartels. Sum up that some of these actions are shown in amateur videos in TV or the Internet to show what would happen to traitors, rivals or officers that try to get in their way. Their

actions almost looked like a paramilitary group taking territory (Grillo, 2012:106). They also make statements with murders "If you betray the cartel, they´ll shoot you in the neck. If you talk too much, they´ll shoot you in the mouth. If you are a spy, they´ll shoot you in the ear" (Hari, 2015, Chapter 9).

The frontal confrontation strategy between the government and cartels formally started in 2006 during the PAN administration of president Felipe Calderon with the eventual support of the US with the Merida Initiative (Felbab-Brown, 2009, Grillo, 2012). While the past administration of president Vicente Fox (from the same party) also used military and focused on busts and extraditions, Calderon "increased military presence in urban areas and boost publicity for all his antidrug efforts" (Grillo 2012:113). The federal government intervention started in Michoacán when the president sent the army and federal police to regain control of areas with large presence of cartels. The frontal confrontation also increased homicide rates, because it created what Ríos (2013) calls a self-reinforcing violent equilibrium (SRE), where enforcement operations, motivate internal and external competition of cartels that translates in violent arrangements, which in turn, increase the number of enforcement operations to confront this turmoil, that, in consequence increases violence rates. While the government was able to track down some of the cartel leaders, this only contributed to the increase of violence, since it created internal conflict within the cartels to substitute their new boss (Ríos, 2013). Also, when violent crimes increases in certain areas, the probability of getting caught tends to decrease, promoting a violent spiral (Hope, 2011).

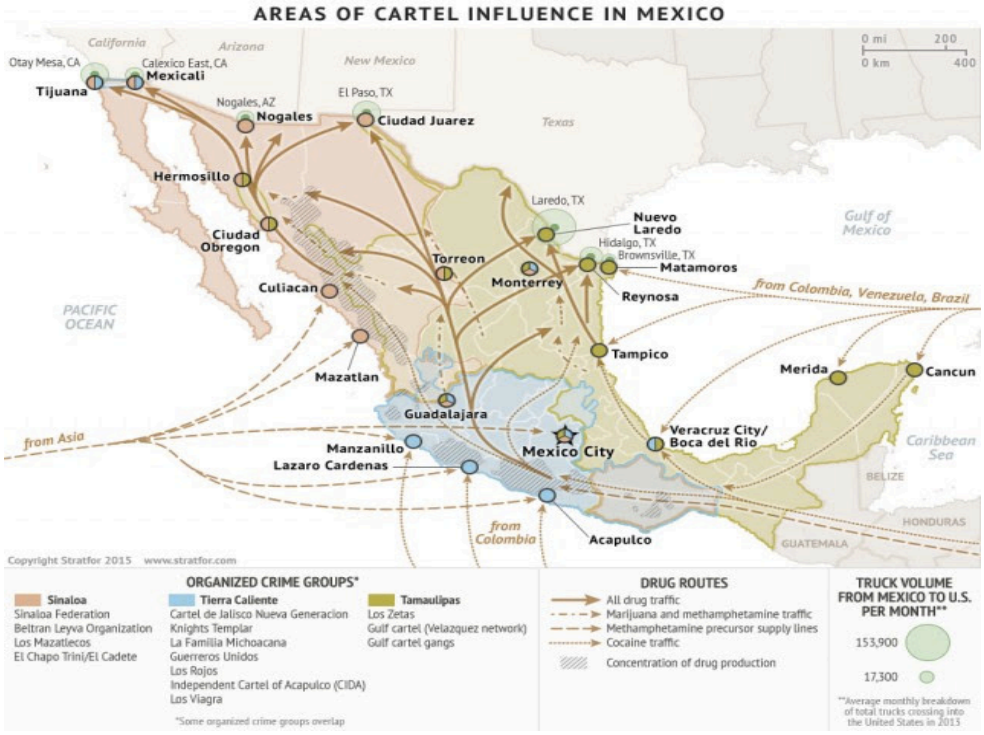
Another event that came into play was the approval of domestic trade of assault rifles in the US in 2004. Since gun trade controls from the US to the Mexican border are easy to violate, this made it cheaper for cartels to purchase high-powered armoury (Dube et al, 2013 and Chicoine, 2011). In consequence, cartels were able to equip themselves with weaponry that sometimes overcomes the firepower of the military and police (Aguilar, 2015). The US-Mexico border controls also seem to have an effect in the increase of violence. After the terrorist attacks of 9/11, security in the US border increased (Aguilar, 2015). The latter motivated Mexican cartels to expand drug dealing in the domestic market and to increase the diversification of their main criminal activities (e.g. extortion and kidnap), to compensate for their losses. Also, the increase of profitability of territorial routes caused by the 2008 regulations on private flights motivated the terrestrial battle between organized crime and the state (Aguilar, 2015).

In these times of battle, all cartels expanded the recruitment of younger sicarios "as fresh cannon fodder" (Grillo, 2012:165 and Monroy, 2015). These sicarios are directly recruited to cartel lines like the case of American Rosalio Reta and his friends. "…Zetas refer to kids like Rosalio, Jesse and Gabriel by a name: the Expendables" (Hari, 2015, Chapter 9). Los Zetas train unskilled sicarios in different camps, which they call La Diestra (Osorno, 2013:2). "They

just teach you everything. Everything you learn at a military camp. How to shoot, how to coordinate…All kinds of explosives, handguns, rifles, hand-to hand combat" (Hari, 2015, Chapter 9). The cartel also made use of their US passport to make their hits in Nuevo Laredo, Mexico and cross the border to their hometown in Laredo, Texas. When answering why cartels used American kids instead of Mexicans he answered "Because of the easy access to both sides of the border" (2015, Chapter 9). Rosalio did not wanted to give more details, but it would not been hard to imagine that he could be referring to weapon smuggling guns from the US to Mexico or drugs from Mexico to the US. "…you´re forced to do what they want. You have to do it, whether you want it or not…. If you don´t do it, they kill you…whether you go in willingly or forcibly, once you´re in, you´re in…It´s a done deal...whether I like it or not, these people moulded me into one of their soldiers doing their deeds"(2015, Chapter 9). Rosalio did not seem to have a problematic or poor background, "My mom and dad both worked, we had stuff to eat everyday. We were normal. We were a family" (2015, Chapter 9).

Cartels increasingly recruit sicarios from existing gangs. For instance, the Juárez and Sinaloa Cartel have recruited members of the gangs Barrio Azteca and Artist Assassins respectively. Both gangs come from El Paso, Texas, the American border town with Ciudad Juárez. "The mass recruitment of Juárez gangbangers is one of the key causes of the bloodbath in the city. It produced a new generation of young, sanguine sicarios only loosely controlled by the crime bosses" (Grillo, 2012:163). This type of sicarios seemed to be more disregarding of the innocent lives when that they take. For instance, the case of the Salvacar Massacre in 2010. Members of Artist Assassins got into a rehab centre while looking for one leader of Barrio Azteca, they shot all of the 17 patients that were there in their search for only one man (2012). In response, Barrio Azteca went to a party to take out three members of Artist Assasins that supposed to be involved in the massacre. The result, 13 victims that most, if not all "had nothing to do with the drug war" (2012:167). There are also cases of recruitment of youngsters from Mexican and Central American gangs, like Frijol from The Calaberas (2012) or Fredi from the El Salvador branch of La Mara Salvatrucha (Reguillo, 2008). "The first jobs were just as lookouts or guarding tienditas [little drug shops]…then they started paying people to kill…" (Grillo, 2012:165), at $85 USD per hit. They started using 9mm and then they were given AK47s (2012). "Being in shoot-out is pure adrenaline. But you see dead bodies and you feel nothing. There is killing every day. Some days there are ten executions, others days there are thirty. It is just normal now" says Frijol (2012:167).

Figure 2. Map of main cartels and trafficking routes of current violent era



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3. Literature review

"Sicarios are not born, they are made"

Interview with Sicario 164,
Bowden (2009:47)

Since there are no studies with a similar approach to this paper, I mainly used the related literature to discuss the origins of the word sicario, the historical background of hired assassins and what motivates them to perform this kind of labour. Also, some of the literature helped to decide which variables to include in the database and how to calculate the opportunity costs of being a sicario. The literature comes from various sources, such as interviews, documentaries and studies about gangs and terrorists[2].

For the international and historical background of sicarios, Abeijón (2006) provides information on the different types of hired assassins. The word sicario comes from the writings of Flavio Josefo during the late first century (2006). The Sicarios were a branch of the Celotas, a religious Judaist extremist group that fought against the roman occupation of Palestine. "They were called sicarios because their killing weapon was a poisonous knife known as sica, with which they use to killed infidels" (2006:15). Although the Romans ended up controlling the rise of the Celotas, the remaining assassins were protected by some part of the population that supported their cause. In exchange for their protection, the sicarios performed killings for personal revenges. From then on, the term sicario started to catch up to the point that the Romans use it to call any kind of criminal regardless if it was part or not of the Celotas (2006). Another relevant example of the most ancient background of hitmen is the case of the Hashasins (the root of the term "assassins") between the XII and XIII century. "The Hashasins came from the Shiite, an heterodox branch of Muslim religion under the order of a Ismaili mystic called Hasan ibn Sabbah"(2006:17). Hasan created an organization of young skilled contracted killers, originally to bring the Turkish invasion of Persian lands. Supposedly, the Hashasins directed their killings to protect their religious purposes; nevertheless, there are indications that after Hasan´s death, the organization divided in several branches that were also hired by outsiders with various kinds of objectives (2006:23-24). In Asia, the most relevant examples of hitmen take back to the Japanese ninjas in the XII century. In Europe, hitmen started as gunmen of the Cosa Nostra in the XIII century and later become the Mafia sicarios of the recent era (2006). Although the present work focuses in the context of a modern

[2] For a detailed list of the type of sources, see Appendix I.

branch of sicarios that work for Mexican and other cartels in the Americas, they share important similarities with their predecessors: young age, incentives, persuasion methods and the emotional impact of the first murder (2006).

Despite the difference in skills and origins of sicarios, there is a common ground regarding their individual features. Since the XII century hired assassins are most likely to start their criminal careers at young or early adult stages (2006). The importance of age and the first killing is crucial to understand this kind of violent labour. The emotional burden and the difficulty to perform the first murder is a turning point to set the young criminal in this type of activity (Abeijón, 2006 and Rubio, 2007). The first killing is usually motivated by a third person and is not necessarily paid; it could be as part of their training or as proof of loyalty to the gang or cartel (Saviano, 2015). Their first victim could be a random person, a relative, or sometimes even a puppy, from which they created a special bond (Saviano, 2015). After the first killing, the burden of the following ones decreases substantially (Abeijón 2006). The tests, methods of persuasion and the difficulty to abandon this line of work seem to be features of the different hitmen throughout the globe. For instance, Menendez and Ronquillo (2006) documented statements of members of the Mara Salvatrucha in Mexico (which some serve as sicarios for organized crime), where they argue that almost nobody goes out alive from the gang, its only a few that are forgiven if they join religious group an "find god" (2006:59). Their contractors initiate hitmen either by promising paradise like in the case of the Hashasins or wealth, power and sex like in the case of cartel sicarios (Ors, 2010, Abeijón, 2006). They can be also recruited by force, for instance, there are registered cases in which cartels have threatened to kill Central American migrants in Mexico if they do not join their lines. (Najar, 2013).

The work of Reyna (2011) is an entire confession of former policeman Drago that worked as a sicario between 1997-2001. It is the most complete portrait of a Mexican sicario. Throughout the entire book, Drago shares the connections between corrupt policemen and organized crime. Also, it includes economic and psychological information of the confessor, such as the payments he received from the cartel and the sexual abuse he suffered while he was a child. Furthermore, in the documentary Confessions of a sicario (2010), sicarios like the Doctor and Luis share that they also suffered from sexual abuses and struggled to get out of this line of work. More information about connections between corrupt policeman and cartels can be found in the interview to Sicario 164 in Bowden (2009, El sicario: Room 164, 2010).

Grillo (2012) is the only work that contains a review of different types of Mexican sicarios throughout time and their relation with organized crime. The author includes two interviews with Mexican sicarios, such as Gonzalo (former policeman) and Frijol (gang member) plus one Colombian (Gustavo). All of them were recruited before 20 years old and share the impact of the first murder they committed (2012). The work also contains the review of the profile of

sicarios like former state policeman Miguel Ortiz and gangster Saik. Most of the sicarios in Grillo (2012) say that money was a crucial factor in the decision of becoming a sicario (2012).

The study made by Peñaloza (2010, cited in Castillo 2010) states that on average, most young criminals are upgraded to sicarios at 24 years old. But this seems to be changing and does not necessarily mean that they committed their first murder at that age. More recent study by the Mexican newspaper Excelsior (cited in Ors, 2010) and the Network for Infant Rights in Mexico (cited in El Economista, 2013) have acquainted the increasing share of underage criminals working for cartels. The number of underage (mostly men) recruited by cartels goes around 25-35 thousand since 2011 and they perform various activities. The Mexican government identified that from the almost 6,000 underage imprisoned between 2006-2012, more than a 1,000 were sicarios (El Economista, 2015).

In terms of the main contractor of Mexican sicarios, it should be clear that organized crime is not structured as a typical corporation. According to Valdés (2013b), cartels work distributing different cells with relative autonomy. These cells seem to act as a profit-maximizing firm regardless of their size. Rubio (2007:21) and Levitt and Venkatesh (200) find that even smaller and less powerful criminal organizations or branches of them, such as gangs; tend to act as a multilevel firm with well-established tasks and hierarchies. If the cartel functions as a rational firm it means that it hires hitmen with a predetermined strategy, thus their payment, numbers and profile depends on the time and place where the sicario is hired. According to Ríos (2010a), it is expected that in times of conflict or expansion, the cartel will require more skilled forces to protect the high hierarchy members or to perform high-profile murders It will also require cheaper sicarios to settle minor conflicts (e.g. between gangs) and use them "as fresh cannon fodder" (Grillo, 2012: 165).

The literature on gangs and terrorists also provides helpful arguments and tools of analysis to understand the motivations behind this kind of labour. The monetary returns, the probability of an adverse event and the level of education (in less extent), do not play a defining role when it comes to engaging in violent activities (Krueger, 2008, Rubio, 2007, Castillo, 2010). The work by Rubio (2007) concludes that family background, especially abandonment of the father, an easier access to sexual activities and the power of aggression, play a more determinant role into the individual decision to engage in violent activities. Staying in school can help to increase the likeliness to abandon a gang but does not necessarily prevents the likeliness of temporarily being part of one (2007). A similar conclusion can be found in Krueger (2008) where terrorist wealth and their level of education are not crucial variables that determine the likeliness to join this organizations or even for the common individual to justify a violent crime committed by others. Although a terrorist may have a different motivation than a sicario, the variables analysed by Krueger (education,

income, place of origin, etc.) also apply to the current study. The work of Vilalta (2015) on Mexican first-degree murderers of the years 1997-2010 also point in a similar direction.

4. Theoretical/analytical framework

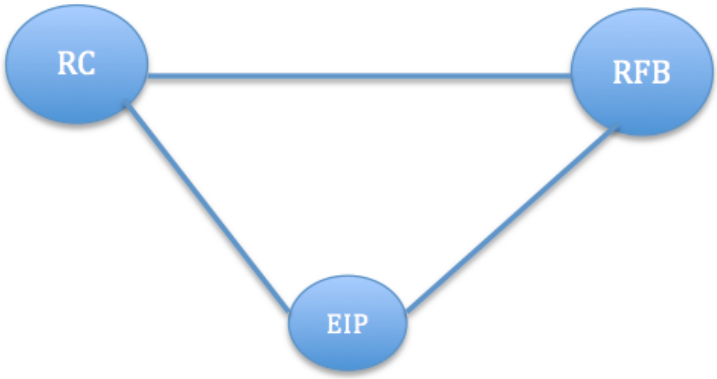
"Go, you already have blood in your hands. You have no other choice that to stay inside"

Lyrics from "El niño sicario",
Calibre 50 (2012)

For the purpose of this paper, I define a sicario as a labourer that it is hired by organized crime (or gang) with the purpose of committing a homicide. Such crime is directly related with maximizing (or protecting) the profits of the contractor. Although a sicario can also be hired to commit crimes that go beyond the economic interests of the contractor (religious, passion, revenge, etc.), the scope of this paper will only reduce to those related with organized crime. A sicario should be treated as a person that could enter this line of work either by choice, peer-pressure (constrained choice) or force. His inclusion is influenced by specific individual, familiar and institutional factors.

Since sicarios tend to commit their first violent crime and join organize crime during young stages, the framework has to take into account the peculiarities of youngsters (or young adult) decision-making. According to Rubio (2007), there are three essential factors that have to be taken into account when studying young people´s behaviour. The factors are represented in The Trilogy of Controls (TCI) proposed originally by Elster (1997, 1999). The TCI framework includes: (1) rational choice approach (RC), (2) rule-following behaviour (RFB) and (3) the emotional-instinctive passion component (EIP). Next, I will explain each factor and describe the hypotheses that rise from such framework.

Figure 3. Trilogy of controls



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The rational choice approach (RC) is based on the classic work by Becker (1974), on crime and punishment. The RC states that an agent´s decision to

engage in criminal activity is mainly driven by the expected and present returns, the probability of suffering an adverse event (incarceration, death) and the risk aversion of the individual. If a potential sicario joins this kind of labour motivated by a rational decision-making then his returns would have to be considerably higher than staying in school or performing a legitimate labour, since it is a highly risky activity. It could also be the case where the initial returns of being a sicario are relatively low, but if he knows in advance that he could eventually scale up in the hierarchy of the cartel and increase his income (or reduce the risks by being in a leadership position), the potential sicario might engage in violent crime (Ríos, 2010b). Regarding the risks, with such high levels of corruption and a low probability of getting caught, it is expected that sicario´s main concern is getting killed and not incarceration (Grillo, 2012). I use a similar approach to Levitt and Venkatesh (2000) work on gangs to calculate the value of life of gang members taking into account their income and risk of suffering an adverse event, in this case by calculating the active life of a sicario.

The work of Becker (1974) and the literature that followed the same approach has been able to explain decision making for some types of crimes, especially non violent (e.g. bribing an officer or parking in the wrong place). However, when it comes to violent labour, the RC only gives a partial explanation of the whole picture. Higher sanctions and risks do not necessarily translate in a decrease of violence (Rubio, 2007). For instance, in the case of Mexico, the increase of violence did not respond to a decrease in law enforcement or because of the presence of organized crime. Such factors always existed. Since the 1940s, Mexico has experienced major drug trafficking, poor law enforcement (e.g. rates around 90% of crimes unsolved) and corruption related with organized crime. "International evidence shows that there is no mechanic and direct connection between drug smuggling intensity and levels of violence" (Hope, 2011: 273). If one compares countries like Turkey and Thailand, both essential traders of opium and heroine, they have never experienced such violent rates (2011:273). The mentioned factors seem to be more "accelerators rather than detonators of [the violence] process" (ICESI 2002 and Bergman et al. 2007, cited in Hope 2013).

Monetary returns do not always determine the chances of becoming a criminal. For instance the work by Rubio (2007), he studied the expenditures of a random sample of students from five different Central American countries. The author finds that there is no substantial difference between the expenditure of students that were gang members and students that did not were part of a gang. Rubio (2007) also finds that middle class and high-middle class represent the majority of the ones that have been part of a gang (63%), while the poorest students only represent 15% (2007:23). He argues that in countries where the income might have a positive relation with getting away with crime, a wealthy gang member can become a more valuable asset than its poor similar. Also, the work of Krueger (2008) helps to narrow down the relation of socio-

economic variables with the likelihood of being a terrorist. Krueger (2008) found that individuals do not engage in violent activities because they are uneducated and poor, on the contrary, there are cases of wealthy and literate people that choose to engage in violent labour. The same logic could be applied to hitmen. If the returns of being a sicario are similar or less than the ones that an average Mexican can earn in his active life, then there must be factors beyond rationality that affect his inclusion in such violent and risky labour.

The Rule Following Behaviour (RFB) factor follows the sociological approach for norms, rules and values as elements that affect behaviour (Rubio, 2007). People are influenced by their community in terms of discipline. The importance of passing norms normally relies on family rules and education (2007). For instance, gangs or cartels will try to persuade or force the newcomers to challenge the norms in which they were raised. Expecting that they gradually abandon the RFB component in their decision and adopt the gang codes to assure their loyalty. The tests and trainings that bosses make to potential sicarios would be interpreted as an attempt to disturb the RFB of the individual; especially in the cases were the sicario joins by persuasion.

The Emotional-instinctive passion component (EIP) includes the cognitive limitations such as, emotions, compulsions, passions and addictions (Rubio, 2007). The EIP tends to play an important role in decision-making of youngsters, at least until 25 years old. The latter does not mean that all youngsters have the same degree of controlling EIP. It means that some individual and familiar factors, such as physical abuse or the abandonment of a father may trigger this component in a way that motivates them to join violent labour (2007). For instance, the first violent crime that a (potential) hitman commits is charged with a large EIP and even if the individual grows old, the event might put him in a criminal path really hard to overcome as compared to non-violent crimes (2007). Also, sexual activity can help as a proxy to measure until what extent the EIP component plays a crucial role in the criminal decision-making. Rubio (2007) finds that, although the monetary returns of gang and non-gang members were similar, this did not happen in terms of their sexual activity. The members of gangs tend to have four times higher sexual activity than non-gangsters (2007:150). Sexual activity in this environment is related with gender abuse, aggression and prostitution, it is not distinguished by mutual consent relationships. This shows, either individuals with low levels of auto-control or that value sexual activity much higher than non-gang members. "Nor the gangs nor its mirror phenomenon, adolescent prostitution, can be accurately understood if the explanation is limited to the labour environment or as an identity search, without considering in explicit manner the strategies of couple searching, fundamentals to any adolescent, of any culture and in any time" (2007:47). It could be argued that if the individual knows in advance that joining a gang will give him access to more sexual activity then the gained utility could be included in a rational approach, but it is not clear if gang members know this in advance. While it could be rational it could also be the case that if

a sicario has a relatively short life, regardless of their income, the sexual interest might increase the EIP against the rational component, more than be a part of it. Sicarios like Rosalio and Drago, state how sexual activity, especially by hiring prostitutes, is part of the everyday life of most of cartel members (Hari, 2015 and Reyna, 2011).

Most of sicarios are not psychopaths in the sense that are completely unable to relate with others. According to psychologist Elizabeth Villegas, most sicarios are careless of the consequences of what they are doing (Grillo, 2012:167). Daniel Cunjama from the National Institute of Criminal Sciences also states that, although, they have a personality disorder which makes them have a lack of empathy, they are not crazy or "monsters" (Gómez, 2010). Even though they have emotional traumas, some of them manage to have families during their active lives, like the case of Sicario 164 or The Big One.

It is expected that if a sicario reports to have emotional traumas before joining this line of work, the EIP would play a higher role in his decision-making. I included in this study if the sicario reports episodes of domestic violence, loss of a close relative when young or father abandonment. However, I did not report as a trauma if the parents were divorced in a relatively peaceful context. Family disintegration does not seem to have a positive relation with crime, at least in Mexico. For instance, Ortega (2010) did not find any clear pattern between criminality and Mexican divorced households with women as boss of the family.

In addition to the TCI, the current violent era, and part of the surge of sicarios, could be in part explained as a case of frequency dependent equilibrium (Bardhan, 1997). Meaning that the individual joins violent labour or becomes violent because his close ones are violent or corrupt. For instance, in the case where a military or policeman are hired in groups that are already managed by organized crime and where is common to be corrupt and violent.. The possibility of committing a violent crime also increases if the individual lives in areas with gangs' presence or have a relatives or friends as gang members (Rubio, 2007).

The historical presence and investment of organized crime in certain areas of Mexico may affect the way these organizations are perceived (Servitja, 2012). The size of direct and indirect employees of organized crime in Mexico suggest that cartels should not be understood as an isolated entity from the other layers of Mexican socioeconomic and political structure (Bagatella, 2014). Estimates like Ríos and Sabet (2008, cited in Ríos 2009) show that cartels employ around 450 thousand people, three times more than the Mexican state oil company PEMEX, the largest employer amongst the world´s oil companies. The historical relation of cartels in some of the Mexican areas may have an effect on the people that choose to work with them in terms of legitimacy, knowledge, family ties, among other factors. Organized crime also can invest in infrastructure

and protection in search for legitimacy and power and cartels also have influence in cultural and religious levels (Servitja, 2012 and Narco Cultura, 2013).

It should be taken into account how this influence can promote violent behaviour, especially in times of conflict. Also, when violence becomes a matter of everyday life in a community it can devaluate the perception of life for its members (Gutiérrez, 2015). This seemed to played a crucial factor in cases such as sicarios like Rosalio and Gabriel Cardona, who mention that in their neighbourhood's cartels like Los Zetas are admired by their peers (Hari, 2015).

This framework portrays an individual that is not a unique control centre of his actions, or a sole cultural entity (Rubio 2007:48). The role of each component is constrained to each specific situation (2007). "For instance, a student that decides not to enter a gang could be situated somewhere between the axis RFB-RC" (2007:49) and "…a jealous marero [gangster] that hurts his couple…would be closer to the EIP point…the behaviour of someone who wants to revenge a relative would be somewhere in the EIP-RFB axis" "(ibid).

In the particular case of hitmen it could be that a corrupt officer that is used to commit torture, kidnap or murder during his job, will choose to join a cartel as a sicario somewhere between the axis RFB-RC; since there is not much difference between the activities and skills required by the cartel. It is expected that this individual might be mostly motivated by the differences in payment, risk and costs of joining illegitimate labour. Whereas a young sicario that is recruited by a cartel without previous experience or skills, will be expected to make the decision to commit his first murder closer to the EIP point, since the returns are not necessarily higher than staying in school or joining the formal labour force. As supported by the testimonies of sicarios in this work and gang members in Rubio (2007): the problem is not as simple as to affirm that gangsters are solely pushed by the circumstances, and blaming the whole responsibility on society, neither saying, that youngsters make the decision without any harm, influence or impulse (2007:30). Taking any of the both extremes (the social or the individual) "presents a simplistic caricature of the human being, especially when it comes to understand young people" (Rubio, 2007: 30).

Overall, the theoretical framework will be used like this: first, I will determine until what extent the RC component plays a role in the decision-making of a sicario. I will do this by comparing the profile of the sicario with the average Mexican, initially, regarding education and employment. Then, I will check if the returns of being a sicario are substantially higher than the ones of the average Mexican. If the later is not the case, I will try to detect which other factors, related with the RFB or the EIP component, motivate him to perform this activity.

5. Data analysis and findings

"We are not monsters. We have education, we have feelings. I would leave torturing someone, go home and have dinner with my family, and then return. You shut off parts of your mind. It is a kind of work, you follow orders."

Anonymous sicario,
Bowden (2009:48)

5.1 Profile of Mexican sentenced inmates for first-degree murder (federal offenders)

5.1.1 Data review and methodology

The individual data on sentenced inmates provides a glimpse to the profile of first-degree murderers in Mexico. I choose to analyse the profile only of federal offenders because a murder related with organized crime is considered a federal offense. That being said, it is more likely that there are cases of sicarios in the data. Although I could have also use data on processed individuals for the same crime, I consider that the information of the sentenced is more likely to be accurate than the processed; especially in a country where 40% of their inmates are still waiting for sentence, the 40th higher share in the world out of 160 countries (Center for Prison Studies, 2012 cited in Zepeda, 2013).

I use the results in Vilalta (2015) for the federal offenders sentenced for first-degree murder between 1997 and 2010. Vilalta (2015) is the first paper to systematize information on the profile of federal offenders sentenced for intentional murder in Mexico (2015:175). While he compared first-degree murderers (533 inmates) with other sentenced for intentional federal crimes (347,433 inmates), I will compare his results with the average Mexican, especially in terms of the education level and employment. His results come from the database of the National Institute of Statistics and Geography (INEGI) of all the registered federal inmates in Mexico (Vilalta, 2015). I compliment the results in Vilalta (2015) with an analysis of the data of the same source but for the year 2012 (INEGI, 2012). I do this, because 2012 is the only year that Vilalta (2015) did not use in his paper and it is the only year left in the database of INEGI (there is no more updated data).

While it is highly likely that there are some sicarios in the sample, there is no way to detect them. When requesting this data from the Decentralized Ad-

ministrative Organism of Prevention and Social Rehabilitation (OADPRS), they responded that when the inmate is sent to the federal prison courts only share the information regarding the inmate dangerousness (skills on using weapons) and recidivism (OADPRS, 2015 and Vilalta, 2015). However, from the 533 sentenced for first-degree murder between 1997-2012 only 12.9% reported to have been in prison before, this means that most of the sentenced for murder are in prison because of their dangerousness (Pérez et al. 2012, cited in Vilalta, 2015). The same share reported to have been a former police or military, thus, it is likely that the remaining share includes other skilful individuals that worked as sicarios. To further increase the likeliness of having sicarios within the analysed data. I did a simple exercise with the data of 2012 (INEGI, 2012). I created a special group based on the people that committed their crime in the top ten most violent cities of the sample, which I called "Top Sentenced" (CCSPJP, 2013). I expect that creating the Top Sentenced group increases the likelihood of detecting sicarios that committed homicides related with organized crime in the current violent era. The most violent cities coincide with the places with major presence and conflict between cartels and the government. Similar to Vilalta (2015) I checked information on the age when they committed the crime, sex, and place of birth, education and employment,. A list of the most violent cities can be found in Appendix II.

I also compared the characteristics of the Top Sentenced of 2012 with the remaining sample of the sentenced of the same year to see if there were substantial differences between them. Additionally, I used the information on processed individuals and did a similar analysis. In both cases the results did not show relevant differences. Both of the results are shown in Appendix III.

5.1.2 Results

Table 1 shows an overview of physical and personal characteristics of inmates sentenced for first-degree murder. As expected, they are predominantly men. The latter coincides with the statements in Hope (2015) regarding sicarios. The average age in Vilalta (2015) shows that the inmates are mostly between 25 and 34 years old, while the average age in the Top Sentenced group (31 years) is inside that range. However, assuming that some of these individuals are sicarios, it is impossible to know if the individual committed another undisclosed murder when younger. This is something that can´t be ignored since there seem to be a considerable amount of younger sicarios in Mexico and the sample lacks the information about murders committed by underage. I attempted to use the data of INEGI for underage inmates; nonetheless, the available information only permits to have analysed the data by ranges instead of an individual analysis. The main highlight of the underage inmates is that out of 6,000 underage detained for crimes related with organized crime, 1,000 of have been

recognized by the government as sicarios (El Economista, 2015). An interesting result is that most of the individuals of both groups reported to be non-single, meaning that it is highly likely that the sicarios in the data were in a relationship. The latter coincides with the relationship profile of sicarios like The Big One or Sicario 164 which were able to have a family at the same time they worked for organized crime.

Table 1. Inmates sentenced for first degree murder: personal and physical characteristics

Characteristic	Vilalta (1997-2010), N=533*	Top sentenced (2012), N=18**
Male	92.30%	100%
Average Age	25-34***	31
Single	25%	11%
Under the influence	9%	0%

Source: INEGI (2012) data and Vilalta (2015) *Elaborated by the author*

**Vilalta (2015) uses the sample of sentenced for intentional murder of INEGI between 1997 and 2010*

***Sentenced for intentional murder in the top 10 most violent cities of year 2012 (INEGI, 2012)*

****predominant range of age*

Table 2 shows the occupation of the individual while the crime was committed. The economically inactive could be students, full time criminals or did not engage in any activity at all. The share of economically inactive individuals in the results of Vilalta (2015) is only of 5%, while the rest report to be in different kinds of occupation. While the Top Sentenced group shows a much higher share of economically inactive individuals (28%), the occupied share still considerably high (72%). It could be argued that the economically inactive in the sample are more likely to be sicarios, especially assuming that most of them are full time criminals, nevertheless, there is no way to distinguish this. On the other hand, it could also be the case that individuals that work in Protection and Surveillance might have more skills in the use of weapons; thus, some of them could work as hired assassins. While there is a significant share of people in Protection and Surveillance in the Top Sentenced group (17%), the result cannot be conclusive since it is the same share for the occupation of Transportation operators, a kind of labour that is not clearly related with the skills required by a hitmen.

While I cannot draw a clear relation on the type of labour and the likeliness of becoming an intentional murderer, this is still an important result. The employment factor is sometimes attributed as directly linked with the current violent era. For instance, NGOs like Cauce Ciudadano (Cruz et al., 2013) argue that part of the violence problem relies on the 7 million unschooled and unemployed Mexicans between 15-29 years old. However, once you separate per gender the story changes. The 7 million are predominantly represented by women (72%), which represent the highest share of the OECD countries (Toribio, 2011). But sicarios and intentional murderers are mostly men (Hope, 2015). The rates of Mexican males both unemployed and unschooled are lower than the average of the countries of the OECD, representing only 10.7% of the whole population of young men (Toribio, 2011). Also, the number of young people without work or studies has a decreasing tendency and overall it

has decreased by 30% points since the 1960s (Tuirán and Ávila, 2012). From the mentioned rates and the results of this section, it seems that employment do not play a direct role in the likeliness of becoming a violent criminal.

Table 2. Inmates sentenced for first degree murder: occupation

Top three jobs Vilalta (1997-2010), N=533*	% Vilalta	% Top Sentenced
Agriculture	23%	6%
Craftsman and construction	16%	11%
Proffesional	15%	0%
Top three jobs Top Sentenced (2012), N=18**	**% Top sentenced**	**% Vilalta**
Economically Inactive	28%	5%
Protection and Surveillance	17%	7%
Transportation operators	17%	10%

Source: INEGI (2012) and Vilalta (2015) *Elaborated by the author*

**Vilalta (2015) uses the sample of sentenced for intentional murder of INEGI between 1997 and 2010*

***Sentenced for intentional murder in the top 10 most violent cities of year 2012 (INEGI, 2012)*

Table 3 shows that in both groups there is a large share of inmates with education above or around the male Mexican average of education: 8.7 school years (incomplete secondary) (INEGI, 2010). While in the case of Vilalta (2015) inmates with primary education are predominant (35%), almost half of the sample has bachelor and secondary studies (45%). The average Mexican with bachelor studies has a wage three times higher than one with primary education (INEE, 2010). Additionally, most of the Top Sentenced group concentrate in High School and secondary studies (78%) while primary only represents 17%. The returns of an average Mexican with secondary studies are approximately 25% higher to one with primary education. Finally, the average Mexican with High School studies has a 40% higher wage than one with primary studies. The results in both groups point out that there is no clear relation between the returns of a potential intentional murderer and its likeliness to commit the crime. The results also coincide with the educational level of sicarios like La Barbie that finished High School or Gonzalo with complete secondary (CNN, 2010 and Grillo, 2012).

Table 3. Inmates sentenced for first degree murder: Education

Top three education Vilalta (1997-2010), N=533*	% Vilalta	% Top Sentenced
Primary	35%	17%
Bachelor	24%	6%
Secondary	21%	39%
Top three education level Top Sentenced (2012), N=18**	**% Top sentenced**	**% Vilalta**
Secondary	39%	21%
High School	39%	18%
Primary	17%	35%

Source: INEGI (2012) and Vilalta (2015) *Elaborated by the author*

**Vilalta (2015) uses the sample of sentenced for intentional murder of INEGI between 1997 and 2010*

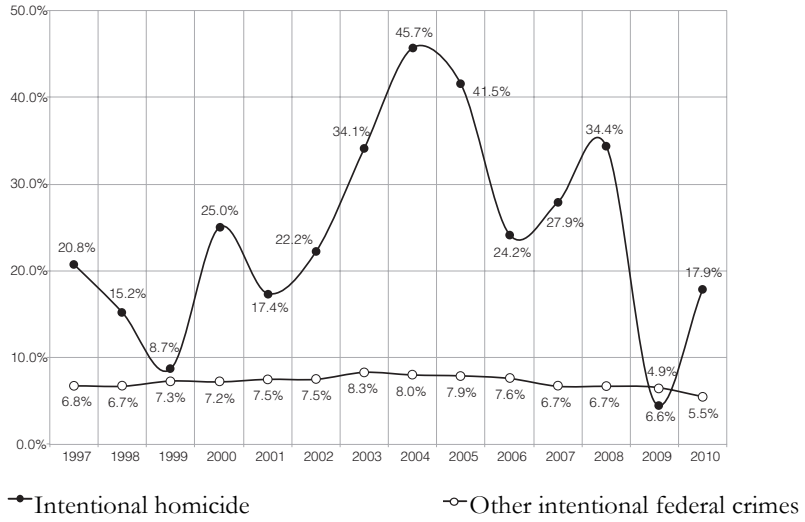
***Sentenced for intentional murder in the top 10 most violent cities of year 2012 (INEGI, 2012)*

Vilalta (2015) also reviewed the educational level within inmates. He compared first-degree murderers (533 inmates) with the sentenced for other intentional federal crimes (347,433 inmates) for the years 1997-2010. The comparison group "Other intentional federal crimes" include kidnap, extortion, among

others. The author found a much higher proportion of married intentional murderers, with university education and occupied as professionals when committing the crime (2015:176). Figure 4 shows how the share of first-degree murderers with professional education is higher than the share of inmates with professional education that committed other intentional crimes

Figure 4. Share of intentional murderers and inmates sentenced for other intentional crimes with professional education

Y axis= share of sentenced with a professional level of education (1997-2010)



©2015, C. Vilalta (INEGI data)

Overall, the results in Vilalta (2015) and the Top sentenced of 2012 indicate that for the case of intentional murderers: education and unemployment do not seem to play a crucial role in becoming a murderer. From the results it cannot be drawn that there is a significant difference in education with the average Mexican and a first-degree murderer.

Although, this method helped to have glimpse on the profile of some sicarios, expecting that they form a considerable share of the analysed individuals, it cannot be conclusive. Besides the limitation of not being able to detect which of the sentenced are specifically hitmen, there is another issue. Inmates are not a representative sample of the profile of the Mexican criminal. In Mexico, more than 90% of crimes are unresolved and only 20% of murderers are sentenced (Vega, 2012). The rate of unresolved homicides increases in four of the most violent states: Chihuahua (96.4%), Durango (95.4%), Sinaloa (93%) and Guerrero (91.5%) (2012). Also, most of the inmates are in prison without a sentence (México Evalúa, 2013) and 90% of the detained between 2007-2011 were liberated (Pachico, 2013). Additionally, high levels of corruption could

translate in a significant share of innocent prisoners and a negative relation of wealth and the probability of getting caught. Another downside is that there might be a substantial amount of homicides that were committed by sicarios that were not registered as federal offenders, for instance, a murder registered as a municipal or state offense (Montero, 2012). Finally, the group of the Top sentenced only covers the sentenced of the most violent cities for the year 2012, while Vilalta (2015) analyses the sentenced for intentional murder at the national level, between 1997-2010. I will expand my analysis of Top Sentenced groups for previous years in future research.

In order to have a better picture of the profile of sicarios I created a database that will serve to explain the profile of these people (Section 5.2).

5.2 Sicario database

I created a database that contains information regarding payments, active life and other characteristics of sicarios. The compilation is a pioneering attempt to create a profile of different hitmen and subsequently understand their motives for becoming sicarios. The sample could be gradually augmented if new information appears in the future. It could also represent a start on the making of a formal database on the labour market for sicarios that will help to follow if there is any change in payments and active life depending on time and place.

The database was created from various sources of information: sicario´s official confessions to the federal police, interviews, biographies and books from experts, specialized sites in crime (e.g. InsightCrime, El Daily Post), journalistic sources (e.g. El Blog del Narco, El Universal) and documentaries (El sicario: Room 164 and Confessions of a Sicario). The variety of sources was not only necessary; it also provides a more reliable picture. It would have been risky to solely trust official police statements in a country where some units of the police and the army have reputation of torturing people to get ad hoc confessions, protected by high levels of impunity and corruption. The most serious limitation on the way that I selected the information is that it was not randomly selected. However, since there are no other compilations, this is a cost that the study has to bear.

The first main contribution of the database is that, while constructing it, I realized that it was necessary to make a distinction between two types of sicarios: (1) "Direct" sicario, which includes individuals who joined directly to a cartel and (2) "Former officer" a sicario with previous experience in the police or the military, including cases in which the sicario performed his activities during his participation in the security forces. The classification is necessary since there is a difference in skills, the way they are recruited, active life and payments. For instance, former officers tend to have longer active lives than Di-

rect sicarios. The distinction is something that hasn't been formally made in the past and facilitates the analysis (Table 4 and 5).

The total of sicarios in the database is 33 (21 Direct and 12 former officers). Most of the sicarios of both groups belong to the "Recent violent era" (period 5); with five exceptions that worked in the era of "Wars and partial capture of the State" (period 4) and one that worked both in the era of "Fragmentation and rupture" (period 3) and "Rise and monopoly consolidation" (period 2).

Table 4. Direct sicarios database

#	Sicario name / nickname	Source	Cartel / gang	Period of activity (1-5)
1	Sicario Z: Anonymous	Osorno (2013): interview	Zetas cartel	5
2	Rosalio Reta	Hari (2014, 2015), Grillo (2012), Lavandera (2013): book, video and audio interview	Zetas cartel	5
3	Gabriel Cardona	Hari (2014, 2015), Grillo (2012), Lavandera (2013): book, video and audio interview	Zetas cartel	5
4	Luis	Confessions of a sicario (2010): documentary interview	Various cartels (freelance)	4
5	Leonardo	Blog del Narco (2014), Boix (2014): interview	Sinaloa cartel: Caballeros Templarios branch	5
6	Saik	Grillo (2012): book interview to colleague	Sinaloa Cartel: Artist Assassins gang	5
7	Michael Gabriel Lozada Álvarez	El Universal (2015): official statement	Sinaloa cartel	5
8	El Seven	Blog del Narco (2015c): journalistic profile	Sinaloa cartel	5
9	Chino Ántrax (José Aréchiga)	Durán (2014): journalistic profile	Sinaloa cartel	5
10	El doctor	Cofesssions of a sicario (2010):documentary interview	N/A	4
11	Anonymous	Ocampo (2013): official statement	N/A	5
12	Beto	Reguillo (2011): interview	La Familia Michoacana cartel	5
13	Frijol	Grillo (2012): book interview	Juárez or Sinaloa cartel: Las Calaberas gang	5
14	Ángel	Martínez (2014): interview, National Journalism Price	Juárez or Sinaloa Cartel	5
15	Franco	Univision (2010): interview	Juárez cartel	5
16	Fredi	Reguillo (2008): interview	Gulf cartel: Mara Salvatrucha Gang	5
17	Osiel Cárdenas Guillén	Blog del Narco (2015a) and Padgett (2012): journalistic profile	Gulf cartel	4
18	Rafael Caro Quintero	Blog del Narco (2015a): journalistic profile and Beith (2014): journalistic profile	Guadalajara cartel	2&3
19	El Ponchis	Najar (2013): interview Ors (2010): colleague statement, JUAREZVIOLENTOO (2010): TV Interview, Chouza (2013)	Beltran Leyva: Pacífico Sur cartel	5
20	El Cris	Ors (2010): interview	Beltran Leyva: Pacífico Sur cartel	5
21	Édgar Valdez Villarreal "La Barbie"	Wikipedia (2015) and CNN (2010a): journalistic profile	Beltran Leyva cartel	5

Elaborated by the author

Table 5. Former officer sicarios database

#	Sicario name / nickname	Source	Cartel / gang	Period of activity (1-5)
1	Israel Nava Cortéz, "El Ostión"	Univisión (2009): journalistic profile	Zetas cartel	5
2	Heriberto Lazcano "El Verdugo" (Z-3)	Padgett (2012): journalistic profile	Zetas cartel	5
3	Arturo Guzmán Decena (Z-1)	Padgett (2012): journalistic profile	Zetas cartel	5
4	José Daniel García "Zafiro"	Pachico (2011): official colleague statement, Noticaribe(2010): journalistic profile	Zetas cartel	5
5	Drago	Reyna (2011), Confessions of a sicario (2010): interview/documentary	Sinaloa Cartel: Pacific branch	4
6	El Jaguar, Germán Ceniceros Ibarra	La Pared (2014): journalistic profile	Sinaloa cartel	5
7	Anónimo	Blog del Narco (2015b): interview	Sinaloa cartel	5
8	Miguel Ortiz "Tyson"	Grillo (2012): book based on statement	La Familia Michoacana cartel	5
9	Gonzalo	Grillo (2012): book interview	Juárez or Sinaloa Cartel	5
10	Sicario 164: Anonymous	El sicario: Room 164 (2010), Bowden (2009): interview/documentary	Juárez cartel	4&5
11	El Diego "José Antonio Acosta"	El Daily Post (2015): journalistic profile	Juárez Cartel	5
12	Sergio Villarreal "The Big One"	FOROtv (2010), Wikipedia (2014): journalistic profile	Beltran Leyva: Pacífico Sur cartel	5

Elaborated by the author

From the information of the database, I considered that a sicario is any individual that has occupied any of the second and third ranking in the cartel (Sicario or Sicario Boss), either permanently or temporarily (Table 6). Direct sicarios tend to have a shorter active life (around 4 years) and find it more difficult to rise up the hierarchy. They generally start from the lowest rank (Falcon) and they rarely overcome being a low-paid Sicario Boss. It seems that one of the few things that help a Direct sicario to have a relatively high wage and occupied higher rankings is having a US passport, like in the case of "La Barbie". Former officers, normally have a direct pass to the cartel as Sicarios, since they have already learned the necessary skills to perform their duties and might have useful connections and knowledge on how security institutions work. In some cases they also have created their own armed wings and cartels, reaching the highest ranks as Capos or Bosses. While there is nuances in-between each of the rankings the general picture of the road of a sicario coincides with the main organizational structures of different cartels (Appendix IV).

Table 6. The road of a sicario (general picture)

Level of Hierarchy	Name of position	Main activities	Aprox time to scale
Low	Falcon	Supervise/Report/Drug smuggling/gang member	Less than a year
Mid Low	Sicario (hitman)	Assassinations/Kidnapp/Protection/gang member/former officer	3-4 years
Medium	Sicario boss	Leader of a sicario cell/responds to higher ranked/former officer	Permanent with bonus and raise
High	Lieutenant (plaza boss)	Regional leader	Depends on boss decision/life
Top	Capo (Drug lord)	Right hand of boss/supervise general operations	Depends on boss decision/life
Boss	Boss	Top Leader	Unclear

Various sources (see Appendix IV) *Elaborated by author.*

5.2.1 Variable description

The database contains 27 variables. None of the individual cases have sufficient information on every variable. Only five cases (Drago, Sicario 164, Angel, Rosalio and Zafiro) are almost complete and will be discussed in the last section. The whole database should be treated as a set of individual incomplete cases that altogether give a general picture of the sicario profile.

Table 7 shows the number of results and the description of the first 18 variables. For instance, of the set of 21 Direct sicarios, there are only 12 cases that report information about their state of origin (country was only taken into account if they were foreigners). On the other hand, there are 6 results out of the 12 cases of former officers. The same logic applies to the following variables. It should be noticed that if the sicario or the document disclosed information about their approximate age such as "early 20s" it is also reported. The same thing in the case of approximate number of killings.

Table 7. Number of results per variable

		#Results Direct (N=21)	#Results f. Officer (N=12)
1	**Country/State of origin** **Country was only taken into account if sicario is foreigner.*	12	6
2	**Main State of work** **State where the sicario mainly operates.*	19	8
3	**Cartel / gang** **Cartel where the sicario mainly worked.*	19	12
4	**Period of active life (1-5)** **Historical period when the sicario worked.*	21	12
5	**Payment per head** **There are cases where the sicario only gets paid per head and cases where these payments are bonus for special killings.*	13	4
6	**Wage as sicario (monthly)** **Cases of wage-earner sicarios.*	3	3
7	**Starting criminal Age** **Age when the sicario started criminal life (non-violent crimes included).*	13	8
8	**Active criminal life (years)** **Years from the first criminal act to the end of the criminal career.*	14	8
9	**Active sicario life (years)** **Years in which the person acted as a formal sicario or sicario boss.*	12	8
10	**Age first violent act (murder, rape, kidnapp, torture)** **Age when the sicario was involved in a violent crime for the first time.*	12	9
11	**Presumed number of killings (commited or involved)** **The murders that a sicario reports as involved are also included. Sicarios sometimes act as a group (e.g hit squads) and regardless of who ended the victim's life they get paid.*	9	3
12	**Skill (based in number of kiilings)** **I considered that the sicario climbs one skill level every 15 hits (low, medium and high).*	6	3
13	**Initial activity** **Refers to the hierarchy in which the sicario started to work in the cartel.*	14	10
14	**Latest activity** **Refers to the hierarchy in which the sicario ended his work in the cartel.*	18	12
15	**Latest hierarchy level** **Refers to the latest level of hierarchy in which the sicario worked in the cartel, being Falcon the lowest and Cartel Boss the highest.*	18	12
16	**Estimated time to scale (from initial to latest job)** **Time that took the sicario to climb from the starting rank to the latest (if the case).*	13	7
17	**Previous income level** **Included if the sicario stated things like "we were poor" or "middle class" or that the source had information about it.*	3	3
18	**Education** **Included if the sicario disclosed his educational level or that the source had information about it.*	5	3

Elaborated by the author

Another finding while building the database is regarding payments (variable 5 and 6) I found that within both of types of sicarios there are ones which only receive payment per hit and other type of sicarios that earn fix wages and once in a while receive bonus payment for special killings. Also, I did not find a direct relationship between the skills based on the number of killings (variable 12) with the latest hierarchy of the sicario; meaning that the killing rate is not sufficient condition to get promoted. Trust, connections and other type of skills may play a more determinant role in the hierarchies and responsibilities in the cartel; unfortunately, I could not gather sufficient information on that basis.

The occupation before turning into full-time criminals is detailed in Table 8. For Direct sicarios I have information for less than half of the cases and they are predominately students. In the case of former officer I have the information of the entire sample, most of them being in different branches of the police. It should be noticed that none of the ones who reported their previous occupations stated to be unemployed, this supports the results of the previous sections regarding employment not being a crucial factor in the likleliness of becoming a first-degree murderer.

Table 8. Previous occupation

	#Results Direct (N=21)		#Results f. Officer (N=12)
Student	5	**Infantry soldier**	1
Boxer	1	**Elite soldier**	2
Singer	1	**Police apprentice**	1
Total responses	7	**Graduate Policeman**	3
		Coordinator of city police	1
		State policeman	2
		Ministerial police	1
		Federal policeman	1
		Total responses	12

Elaborated by the author

I also registered if they disclosed experiencing previous emotional trauma, such as domestic violence or sexual abuse. According to school psychologist Villegas they usually come from broken families (Grillo, 2012:167), nevertheless, I detected some cases in which this was not a factor (Table 9). Usually sicarios tend to get use to the work and stop feeling guilt of their actions (2012:167). Some, like Sicario 164, are able to have families and more or less normal lives after their work (El sicario: Room 164, 2010). But the ones who survived do seem to have a burden and regret for their actions. Also, as there are cases of Direct sicarios being forced to work in the cartel, I registered eleven cases in which this happened voluntarily or by persuasion of a close one. Most of the sicarios on the database have been arrested or retired.

Table 9. Emotional trauma, recruitment and current status

	#Results Direct (N=21)	#Results f. Officer (N=12)
Previous emotional trauma		
Yes	6	1
No	2	3
Total responses	8	4
Emotional trauma during or after sicario		
Yes	6	3
No	0	0
Total responses	6	3
Voluntary/Persuasion/Coercion		
Voluntary	9	2
Persuasion	2	2
Coersion	4	0
Total responses	15	4
Current status		
Arrested	11	5
Released	4	0
Active	1	0
Killed	0	4
Retired	5	3
Total responses	21	12

Elaborated by the author

Finally, I used complimentary variables to include in the context of the work and that could also help to have an idea of the risks of being as sicario. For instance, the variable Death colleagues show that five sicarios reported to have lost most of their colleagues in the way. There are also cases in which they report to be paid with drugs, prostitutes or cars (Other type of payment). The Direct sicarios also reported to have been trained in camps or by older sicarios, in the case of former officer, by definition they all have learned skills in their previous jobs. I also registered what other crimes have they committed, such as smuggling migrants or drug trafficking (Table 10).

Table 10. Additional results

	#Results Direct (N=21)	#Results f. Officer (N=12)
Death colleagues	3	2
Other type of payment	3	0
Training	5	12
Other crimes	4	1

Elaborated by the author

5.2.2 Profile of sicarios of the current violent era

Since the main concern of the paper is the current violent era (period 5), I excluded sicarios that worked in previous historical periods for this part of the paper. Also, the analysis in this section will serve to later calculate the opportunity cost of being a sicario and the payments of sicarios of previous periods tend to differ substantially from the current ones. However, in the last section I will use the example of an "ancient" sicario to revise these differences[3]. Furthermore, in this section I focus in 13 variables that are directly related with the calculation of the opportunity cost. The remaining variables will serve as complimentary information for the results of the following sections.

Table 11 shows the overall results of the profile of a Direct sicario in the current violent era. The lowest paid hits are for $60 and a high profile murder can go up to $16,000. The two sicarios that reported to have earned the maximum amount have American citizenship (Rosalio and Gabriel Cardona). Since there are only three results regarding monthly payments, I added an external source of the sicario minimum wage. Vela (2014) disclosed that the minimum wage of a sicario of the Knights Templar cartel is $528. This number is lower than the minimum I have in the database ($960 of a Zetas sicario) and since it was taken from official accounts of the cartel it is likely to be more accurate. The youngest starting criminal age is of eleven years old and while the maximum value is in the early 20s, most of the individuals started before 15 years old (7 of 10). The maximum sicario life reported is of 7 years old and the lowest was less than a year, most of them have an active life around 4 years. The first violent crime was committed before 22 years old in all of the reported cases. The total number of hits varies from 3 to 70 hits. The most prevalent initial activity of the cartel is in the lowest hierarchy (Falcon) while the highest starting hierarchy reported was at the medium level (Sicario Boss). The only person that started as Sicario Boss had a US passport (sicario "La Barbie"). The same individual reached the highest hierarchy of the sample (Lieutenant) while the rest ended up at the Mid-low level (sicario). The minimum time to scale from Falcon to sicario was reported as three months and the maximum 2 years. The lowest education level reported is similar to the Mexican average of incomplete secondary, while the highest educated reported to have finished High School.

[3] For the review of the values of sicarios from all periods, see Appendix V

Table 11. Overall results: Direct sicario, only violent era (period 5)

	Results per variable (N=17)	Min	Max
Payment per head*	11	$60	$16,000
Monthly Wage as sicario~	3	$528	$2,000
Starting criminal age	10	11	Early 20s
Active criminal life*	11	Less than a year	Around 14
Active sicario life (years)*	10	Less than a year	7
Age first violent act (murder, rape, kidnapp, torture)*	10	11	At least 22
Presumed number of killings (commited or involved)	7	3	At least 70
Skill (based in number of killings)	5	Low	High
Initial activity and hierarchy in the cartel	12	Falcon (Low)	Sicario Boss (Medium)
Latest activity and hierarchy in the cartel*	15	Sicario (Mid-low)	Lieutenant (High)
Time to scale to sicario	5	Three months	2 years
Previous Income level (as stated by sicario or document)	3	Poor	Not poor
Education level	4	Incomplete secondary	Finished High School

~ Because of lack of information in the "Min monthly wage as sicario", the number was taken from Vela (2014)
*This are the results that would have changed if the sicarios from previous periods were included (see Appendix V)
Numbers in USD 2015
Elaborated by the author

I separated Direct sicarios in two groups: wage-earner and paid per hit (Table 12). A wage-earner gets a yearly income between $6,336-$24,000. For this example I did not take into account that a wage-earner can also receive bonus payments for high profile kills, but this possibility will be revised in the last section. To calculate the yearly income of a sicario paid per hit I used the minimum and maximum values of the payment per head and the number of killings per year. To calculate the number of killings per year I divided the total number of killings with their active sicario life. A sicario that earns the lowest paid per hit and makes the lowest number of hits a year will earn $120 while his opposite will earn a yearly income of $288,000. It is unlikely that a paid per hit sicario will earn either the maximum or the minimum income. Since it would not solely make low and high profile kills, I also calculated the combination of the maximum kills and the minimum paid and vice versa to get values in-between.

Table 12. Yearly income of direct sicario (from overall results)

Direct sicario wage-earner	
Min monthly Wage sicario*	**Max monthly Wage sicario**
$528	$2,000
Min yearly income of a direct sicario wage-earner	$6,336
Max yearly income of direct sicario wage-earner	$24,000
Direct sicario paid per head	
Min payment per head	**Max payment per head**
$60	$16,000
Min number of killings per year (kiilings/active sicario life)	**Max number of killings per year (#kiilings/active sicario life)**
2	18
Yearly income of a direct sicario with min kills and min payment	$120
Yearly income of a direct sicario with min kills and max payment	$32,000
Yearly income of a direct sicario with max kills and min payment	$1,080
Yearly income of a direct sicario with max kills and max payment	$288,000

Numbers in USD 2015
Elaborated by the author
**Addtional source: Vela (2014)*

For the case of a former officer sicario I used the same analysis (Table 13-14). The three reported payments per head go around $5,000-$20,000. I also used information from another source in the case of the monthly wage, since I only have one result in the database. I used the same source of Vela (2014), which details the different wages of sicarios of a Knights Templar Cell, the added number is the Max monthly wage ($960). The starting criminal age results are all above 17 years old being the highest value of a starting criminal at 26 years. The results of this variable could be higher than in the Direct sicario case because I took the moment they report to start working directly for the cartel, it is not shown if they committed other types of crimes during their officer job. The lowest active sicario life was of 2 years while the maximum around 20. The age of their first violent act goes around 13-30 years old, again the old age could be inaccurate since it is likely that they committed violent acts (legal or not) during their time as police or soldiers. The presumed number of killings varies from 23 to 250. The ranks in the cartel go from people that started as sicarios or lieutenants to people that ended up as sicario and cartel bosses. The only one that started as a Falcon required three months to scale to sicario. The yearly income of the different types of former officer sicarios was calculated the same way as in the case of Direct sicarios.

Table 13. Overall results: Former officer sicario, only violent era (period 5)

	Results per variable (N=11)	Min	Max
Payment per head*	3	$5,000	$20,000
Monthly Wage as sicario~	1	$655	$960
Starting criminal age	7	17	26
Active criminal life*	7	5	Around 20
Active sicario life (years)*	7	2	Around 20
Age first violent act (murder, rape, kidnapp, torture)*	8	13	At least 30
Presumed number of killings (commited or involved)	2	At least 23	250
Skill (based in number of killings)	2	Medium	High
Initial activity and hierarchy in the cartel	9	Falcon (low)	Lieutenant (high)
Latest activity and hierarchy in the cartel*	11	Sicario (Mid-low)	Cartel Boss (Boss)
Time to scale to sicario	4	0	3 months
Previous Income level (as stated by sicario or document)	3	Poor	Low middle class
Education level	3	Incomplete high school	Complete High School

~ Because of lack of information in the "Max monthly wage as sicario", the number was taken from Vela (2014)
*This are the results that would have changed if the sicarios from previous periods were included (see Appendix V)
Numbers in USD 2015

Elaborated by the author

Table 14. Yearly income of former officer sicario (from overall results)

Former officer sicario wage-earner	
Min monthly Wage sicario* $655	**Max monthly Wage sicario** $960
Min yearly income of a former officer sicario wage-earner	$7,860
Max yearly income of a former officer sicario wage-earner	$11,520
Former officer sicario paid per head	
Min payment per head $5,000	**Max payment per head** $20,000
Min number of killings per year (kiilings/active sicario life) 7	**Max number of killings per year (#kiilings/active sicario life)** 13
Yearly income of a former officer sicario with min kills and min payment	$35,000
Yearly income of a former officer sicario with min kills and max payment	$140,000
Yearly income of a former officer sicario with max kills and min payment	$65,000
Yearly income of a former officer sicario with max kills and max payment	$260,000

Numbers in USD 2015

Elaborated by the author

**Addtional source: Vela (2014)*

5.3 Opportunity cost

To calculate the opportunity cost of being a sicario on the current Mexican violent era I use minimum and maximum figures regarding payments and number of killings and the average active life of the reported cases. Also, supported by the historical background and the high levels of impunity and corruption in Mexico, I disregard that the probability of getting caught and the size of the penalty play a significant role in the individual likeliness to get involved in these activities. I use the information to calculate the monetary returns of being a sicario during his active life and compare them to the average Mexican labourer, policeman and soldier in Mexico. The calculation was made from the (1) overall results in the database and from (2) five individual cases that had the most detailed information.

5.3.1 Opportunity cost: overall results in database

I compared the estimated yearly income of a sicario with the average Mexican and the average lowest ranked policeman and soldier (INEE, 2010). Basic education in Mexico means finished secondary level (around 9 years of study). Middle education means completed high school and higher education completed bachelor and graduate studies. Within the types of policeman a city police has the lowest hierarchy, a state policeman represents a medium rank and a federal the highest. Mexicans between 18-24 without basic education earn the lowest yearly wage ($1,866) and Federal policemen earn the highest one ($8,694) (Table 15).

Table 15. Average yearly wage in Mexico: labourers, policemen and soldiers

Average wage per educational level in Mexico (16-24 years old)	Yearly wage
Without basic education	$1,866
With basic education	$2,074
With middle and higher education	$2,765
Average wage per educational level in Mexico (25-64 years old)	
Without basic education	$2,200
With basic education	$2,880
With middle education	$3,721
With higher education	$6,520
Average wage lowest ranked officer Mexico (min age 18)	
Wage state police	$6,660
Wage city police	$5,400
Wage Federal police	$8,694
Wage soldier	$6,880

Source INEE (2010) at Secretariado ejecutivo (2011), Cuanto gana (2015a), Cuanto gana (2015b), Cuanto gana (2015c) *Elaborated by the author*

USD at 2015

Most of the results in Table 15 are lower than the sicario yearly wage. However, sicarios active life tends to be much shorter because of the risks they face. A more accurate comparison would be calculating the total of wealth

earned by a sicario during his average active life and see how many years of work an average Mexican would need to reach the same amount. The average active life of a sicario was calculated from the information of the database, resulting in 4 years for a Direct sicario and 9 years for a former officer. The results of the active years of a Direct sicario are close to the numbers provided by authors mentioned throughout the paper (e.g. Ríos, 2010b and Castillo, 2010). On the other hand it was expected that former officers have longer active lives especially because their hierarchy and connections provides them protection and leadership positions. Table 16 shows the results of the total income accumulated by different types of sicarios during an average active live (blue area). For instance, the lowest total income would be of $480 (Min yearly income of a direct sicario paid per kill). The highest total income would be $2,340, 000 (Max Yearly income of a former officer sicario paid per kill).

Table 16. Total income in average active life

Direct sicario	Yearly wage sicario	Total income in average active life (4 years)
Min yearly income of a direct sicario wage-earner	$6,336	$25,344
Max yearly income of direct sicario wage-earner	$24,000	$96,000
Max yearly income of a direct sicario paid per kill	$288,000	$1,152,000
High yearly income of a direct sicario paid per kill	$32,000	$128,000
Medium yearly income of a direct sicario paid per kill	$1,080	$4,320
Min yearly income of a direct sicario paid per kill	$120	$480
Former officer sicario	**Yearly wage sicario**	**Total income in average active life (9 years)**
Min yearly income of a former officer sicario wage-earner	$7,860	$70,740
Max yearly income of a former officer sicario wage earner	$11,520	$103,680
Max yearly income of a former officer sicario paid per kill	$260,000	$2,340,000
High yearly income of a former officer sicario paid per kill	$140,000	$1,260,000
Medium yearly income of a former officer sicario paid per kill	$65,000	$585,000
Min yearly income of a former officer sicario paid per kill	$35,000	$315,000

Elaborated by the author

Table 17 shows the years of work needed by an average Mexican to reach the total income earned by a Direct sicario during his active life. To calculate this, I divided the total income earned by a Direct sicario during an average active life by the yearly income of the average Mexican. For instance, a Mexican between 16-24 years old without basic education will need 13.6 years of work to reach the minimum total income earned by a wage-earner Direct sicario in his active life ($25, 344). The same person would need 617.4 years to reach the maximum total income earned by Direct sicario paid per kill ($1,152,000).

Table 17. Years of work needed to reach a Direct sicario total income

Average active life = 4 years

	Min direct sicario wage-earner	Max direct sicario wage-earner	Max direct sicario paid per kill	High direct sicario paid per kill	Medium direct sicario paid per kill	Min direct sicario paid per kill
Direct sicario active life income	$25,344	$96,000	$1,152,000	$128,000	$4,320	$480
Average wage per educational level in Mexico (16-24 years old)						
Without basic education	13.6	51.4	617.4	68.6	2.3	0.3
With basic education	12.2	46.3	555.4	61.7	2.1	0.2
With middle and higher education	9.2	34.7	416.6	46.3	1.6	0.2
Average wage per educational level in Mexico (25-64 years old)						
Without basic education	11.5	43.6	523.6	58.2	2.0	0.2
With basic education	8.8	33.3	400.0	44.4	1.5	0.2
With middle education	6.8	25.8	309.6	34.4	1.2	0.1
With higher education	3.9	14.7	176.7	19.6	0.7	0.1
Average wage lowest ranked officer Mexico (min age 18)						
State police	3.8	14.4	173.0	19.2	0.6	0.1
City police	4.7	17.8	213.3	23.7	0.8	0.1
Federal police	2.9	11.0	132.5	14.7	0.5	0.1
Soldier	3.7	14.0	167.4	18.6	0.6	0.1

Low risk area (white)= an average Mexican can reach the same amount of wealth than a sicario in less than 50 years of working

Risky area (yellow)= an average Mexican would need more than 50 years and less than a 100 years to raise the same amount of wealth than a sicario

Appealing area (gray)= an average Mexican would need more than a 100 years of work to raise the same amount of wealth than a sicario

Elaborated by the author

Since the average retirement age of a Mexican is of around 70 years old and, assuming that starting working age is around 20 years old, an active Mexican labourer life is of 50 years (Merino, 2011). I considered that if an average Mexican can reach the sicario lifetime income in 50 years of work or less, then it is a payment that would be unlikely than a rational potential sicario would accept, I will call it "low risk area" (white area). If the years required are between 50-100 then I will call it a "risky area" (yellow area). The risky area represents payments that, although impossible to reach, the opportunity cost could still be relatively high considering the risk of death and psychological damage of taking a life. If the years required are more than a 100 I will call it the "appealing area" (grey area). Meaning that such payments are high enough for a potential rational sicario to decide engaging in this line of work.

In the case of a Direct sicario with a 4-year active life, it seems that the only relatively high income is in the column of "Max direct sicario paid per kill" (Table 17). This represents the case in which a sicario is paid the highest amount of money per hit and commits the maximum amount of hits per year. The case is unlikely to exist since there is no sicario in the database that reported only committing high profile murders. The case of "Min direct dicario paid per kill" is also unrealistic, since it is unlikely that the Direct sicario only gets to make the lowest amount of hits per year at the lowest payment during a whole active life. The results that seem to be more likely to happen are the ones in-between the highest and lowest amounts in the table.

The range of education level of Direct sicarios in the database is between incomplete secondary (without basic education) and finished High School (middle education). That being said, the best comparison groups will be the Mexicans with the same range of education level. Regarding a wage-earner sicario, in most cases, a Mexican with the lowest level of education would be able to reach the same total income during his active life. The only case where this does not happens is in the case of the maximum paid wage-earner, nevertheless, the threshold of 50 years is only passed by one year, so it could be said that the payment does not seem to be relatively high. For all the other levels of education, an average Mexican would be able to earn during his active life more than the total income of a wage-earner Direct sicario. In the case of Direct sicarios paid per kill the story slightly changes. A young Mexican (16-24 years old) would need at least middle education to be able to accumulate more than the total income earned by a sicario. On the other hand, an adult (25-64) would only need to finish basic education. While a Mexican without basic education would not be able to equalize the total income of a sicario, the threshold is surpassed by 18.6 years in the worst case (young Mexican without basic education). Such difference is not clearly high, specially taking into account that the end of a Direct sicario active life is normally death and the emotional traumas that it involves.

In the case of a former officer sicario I did the same analysis (Table 18). For the case of a former officer (F.O.) it is more relevant to focus on the opportunity cost of staying in the police or the army, which represents their previous source of income and the most likely comparison point in their decision. The conclusions do not change for wage-earners. Take out the maximum and minimum total incomes of a sicario paid per kill. Both results are the most unlikely to exist since normally it is not the case that a sicario solely performs either high profile or low-profile killings during his active life. It is most likely that the income of a sicario paid per head is in-between those values. Lets only consider the total income of a "Medium F.O. sicario paid per kill" ($585,000) and "High F.O. sicarios paid per kill" ($1,260,000). In both cases the results are in the risky and appealing area and most of them, except one, surpass the 50 years threshold by more than 30 years.

It could be argued than a policeman and a soldier also face risks similar to a sicario, at least at the national level this does not seem to be the case. Calculating the risk of being an officer by taking the approximate number of officers killed since 2006 and dividing it by the total number of officers: the risk of getting killed does not reach 1% in any of the different types of officers. 92/40,000 federal policemen, 963/227,000 state policemen, 1,296/164,000 city policemen and 357/200,000 military deaths (CNN, 2010b, SEDENA, 2011, Robles, 2011, Sevilla, 2012 and Sánchez, 2013). For further research this risk factor can be improved by selecting the risk of being an officer in a conflict area.

Table 18. Years of work needed to reach a Former officer sicario total income
Average active life = 9 years

	Min F.O. sicario wage-earner	Max F.O. sicario wage-earner	Max F.O. sicario paid per kill	High F.O. sicario paid per kill	Medium F.O. sicario paid per kill	Min F.O. sicario paid per kill
Former officer sicario active life income	$70,740	$103,680	$2,340,000	$1,260,000	$585,000	$315,000
Average wage per educational level in Mexico (16-24 years old)						
Without basic education	37.9	55.6	1254.0	675.2	313.5	168.8
With basic education	34.1	50.0	1128.3	607.5	282.1	151.9
With middle and higher education	25.6	37.5	846.3	455.7	211.6	113.9
Average wage per educational level in Mexico (25-64 years old)						
Without basic education	32.2	47.1	1063.6	572.7	265.9	143.2
With basic education	24.6	36.0	812.5	437.5	203.1	109.4
With middle education	19.0	27.9	628.9	338.6	157.2	84.7
With higher education	10.8	15.9	358.9	193.3	89.7	48.3
Average wage lowest ranked officer Mexico (min age 18)						
State police	10.6	15.6	351.4	189.2	87.8	47.3
City police	13.1	19.2	433.3	233.3	108.3	58.3
Federal police	8.1	11.9	269.2	144.9	67.3	36.2
Soldier	10.3	15.1	340.1	183.1	85.0	45.8

Low risk area (white)= an average Mexican can reach the same amount of wealth than a sicario in less than 50 years of working
Risky area (yellow)= an average Mexican would need more than 50 years and less than a 100 years to raise the same amount of wealth than a sicario
Appealing area (gray)= an average Mexican would need more than a 100 years of work to raise the same amount of wealth than a sicario

Elaborated by the author

The active life of a sicario plays a crucial role in defining the opportunity cost of enrolling in such activity. While the average active life of a Direct sicario coincides with the statements in other works, I do not account for comparable information regarding the average active sicario life of a former officer. I think that it is still a valuable calculation since it was taken from 7 different individual cases (out of a total of 12). At least it points out that the classification is important because former officers tend to have longer active lives provided by their hierarchy and skills.

The overall results seem to point that the decision of a former officer could be more rational than of a Direct sicario. This supports the statements in Reyna (2011), Bowden (2009) and Padgett (2012), in which the officer would not need to learn more skills and if he already have taken the burden of committing illegitimate violent acts (torture, kidnap, murder, etc.), then his decision could be more motivated by the monetary reward. In the case of Direct sicarios that join voluntarily or by non-coercive persuasion they seem to be very low risk averse and give a major value to their short-term income. Additionally, in some cases the relative payment is so low that there seems to be factors beyond the rational that affect their decision-making. In the case they were forced to work for the cartel, the payments make sense, since the organization is expected to give them low payments because the sicarios do not have other choice. Also, even in the case of Direct sicarios that receive training this normally lasts around three months (Benavides, 2009), which might translate in basic skills that do not to affect their active life or hierarchy in the cartel. It should be noticed that sometimes wage-earner sicarios can get bonus payments for special killings, such case will be discussed in the next section.

5.3.2 Opportunity cost: individual cases

From the database I will calculate the opportunity cost of the cases with the most complete information. I will start by briefly describing each case and at the end of the section I will compare their earnings with the average Mexican. The case of Ángel, Rosalio and Sicario 164 are taken from interviews conducted by Martínez (2014), Hari (2015) and Bowden (2009), respectively. The case of Zafiro was taken from the official statements of his colleague "El Javi" (Pachico, 2011 and Noticaribe, 2010). The case of Drago was taken from a biography written by Reyna (2011).

Ángel is the case of a niño-sicario from Ciudad Juárez. Ángel was not engaged in any gang and had a scholarship for his good grades. He was recruited in 2010 and the cartel did not choose him randomly. His father was a sicario and, after his death, they forced Ángel to work with the cartel as a payback. Ángel was 13 years old and his first victim was his uncle (Martínez, 2014).

"…when I did it I felt bad, I could not sleep for two weeks…from then on I gain adrenaline from doing that [killing]"(2014). During the first year of work he received $120 per murder. The following two years he commanded a little group of youngsters and receive $600 per hit from which he gave away $120 to his subordinates, keeping $480. After three years he committed 50 murders. On average, he had a yearly income of $6,120 and total earnings of $18, 360 while he was a sicario (Table 19). Ángel got sick of the sicario life and killed his boss to be able to escape. He is now 18 years old, retired, looking forward to go back to school. He still fears for his life.

Table 19. Ángel: Niño-Sicario paid per head

Min payment per head (for one year)	**Max payment per head (for two years)**
$120	$480
Active sicario life (years)	**Killings per year**
3	17
Current status	**Voluntary/Coercion/Persuasion**
Retired	Coersion

Ángel Income first year	$2,040
Ángel income two last years	$16,320
Ángel active life income (3 years)	**$18,360**
Ángel yearly average income	$6,120

Source: Martínez (2014) *Elaborated by the author*
USD 2015

Rosalio was recruited in 2005 by the Zetas, he was 14 years old (Table 20). He lived in Laredo, Texas in the US side of the border with Nuevo Laredo, Tamaulipas. The way he entered the cartel is full of contradictions, in his initial statements he said that he did it voluntarily because of his admiration for the cartel, but later on he disclosed being forced by them (Hari, 2015). The common ground of the two statements is that some friends invited him to a ranch of the boss of Los Zetas, and the same day he committed his first murder. He was 14 years old and started working as a Falcon while he received training at the same time. He also disclosed having a normal family and that he was not poor (Hari, 2015). Approximately after two years he was officially upgraded to sicario. He states that he received a monthly wage of $2,000 and sometimes was paid bonus payments for special kills. The bonus was around $3,000-$16,000 depending on the victim. He crossed the border to Mexico to commit the crime and also states doing undisclosed activities taking advantage of his US passport (Hari, 2015). He turned himself in prison after 4 years of being a sicario because he feared for his life. He did not disclose how many bonus payments he received. However I will assume that at least he committed two special hits a year: one paid at the maximum amount ($16,000) and one paid at the minimum ($3,000). Under that assumption he approximately earned a year-

ly average income of $43, 000 and a total income of $172, 000 during his sicario active life (4 years).

Table 20. Rosalio case: young sicario wage-earner (US citizen)

Monthly wage	**Active sicario life (years)**
$2,000	4
Min bonus payment per head	**Max bonus payment per head**
$3,000	$16,000
Current status	**Voluntary/Coercion/Persuasion**
Arrested	Persuasion
Rosalio yearly income (without bonus)	$24,000
Rosalio yearly income with bonus (1 Min bonus hit + 1 Max bonus hit per year)	$43,000
Rosalio active life income (4 years with bonus)	**$172,000**

Source: Hari (2015), Grillo (2012) *Elaborated by the author*
USD 2015

Sicario 164 is a former state policeman of Chihuahua. He committed paid homicides during his time in the state police, starting somewhere around the late 80s and early 90s. "They hardly ever do police work. They are working full-time for narcos. This is his real home for almost twenty years…" (2009:49). He received training at the FBI school in the US where he learned to: "…detect drugs, guns and stolen vehicles" (2009:46). He also learnt from older sicarios: "strangulation, killing with a knife, killing with a gun, car-to-car barrages, torture, kidnapping, and simply disappearing people and burying them in holes" (2009:47). He was sent to command one of the two units specialized in preventing kidnapping that itself was dedicated to kidnapping and executing at the orders of various cartels. The sicario committed his first murder when he was 18. "He and his partner use the police code for a homicide: when the number 39 is spoken, it means to kill the person". He retired somewhere around late 2006 and early 2007 (Bowden, 2009:48-49). "By this time [2006-2007], a third of the people he knows have been killed" (2009:52). He escapes because he fears for his life. He is one of the few sicarios that managed to survive almost 20 years in the business of killing. He is most likely to have mainly worked for the Juárez cartel but he states that during his active life he did jobs for different organizations. The sicario states that he did not have any traumas or troubled background, he joined voluntarily. Although he claims that for his first job, he received $1,000 plus an "ounce of coke and a bottle of whisky" (2009:48), he says that this killing was only a test (not an official sicario paid job). That being said, I took the minimum payment per kill from another of his statements where he discloses that a low paid kill was around $5,000 (2009:45). The highest payment he received was of $20,000 (Bowden, 2009). He murdered around 250 people during his active life. He does not disclose ever leaving the police, thus, I will assume that he always earned a state policeman monthly wage of $480 (wage of a state policeman in Chihuahua in SNSP, 2011) plus the payments he got from the cartel. He raised a family during this time. He did not

disclose how much he was paid by every specific murder. I calculated the mean value between the maximum and minimum payment per head and sum his wage as state policeman to get an approximate of his yearly income. Under this assumption, the sicario would have approximately earned a total of $3,365,200, during his active life. Let be known that Sicario 164 worked in both period 4 and 5 (current violent era), thus, this might have decreased the risks he faced in the first years of work (Table 21).

Table 21. Sicario 164: Former state policeman paid per head

Min payment per head	**Max payment per head**
$5,000	$20,000
Monthly state police wage	
$480	
Active sicario life (years)*	**Killings per year**
20	13
Current status	**Voluntary/Coercion/Persuasion**
Retired	Voluntary

Sicario 164 Min yearly income from killings	$65,000
Sicario 164 Max yearly income from killings	$260,000
Sicario 164 average yearly income from killings (Max+Min/2)	$162,500
Sicario 164 yearly income from state police wage	$5,760
Sicario 164 active life income (20 years)	**$3,365,200**

Source: Bowden (2009), Room 164 (2010) *Elaborated by the author*

*Approximate active life

Zafiro worked as a sicario for the Zetas at the same time that he worked as city policeman. He earned a monthly wage of $380 as policeman of the city of Tlaxcala (SNSP, 2011) plus around $655 for working with the cartel, according to the official statement of one of his colleagues (Pachico, 2011). He worked for the police and the cartel between 2006 and 2010. He was arrested just 10 days after abandoning the police (Noticaribe, 2010). As being a part of Los Zetas, I assume that he also got bonus payments for special hits. I also assume that at least he committed two special murders per year, one paid at the maximum and one at minimum at the same amounts that Rosalio (also from Los Zetas) got paid. Under this assumption, the yearly income of Zafiro was approximately of $31,420, raising a total of $125,680 during his active life (Table 22).

Table 22. José Daniel García "Zafiro": Former city policeman wage-earner

Monthly sicario wage*	Monthly city police wage
$655	$380
Min bonus payment per head~	**Max bonus payment per head ~ ~**
$3,000	$16,000
Active sicario life (years)^	**Voluntary/Coercion/Persuasion**
4	Undisclosed

Former policeman yearly income (without bonus)	$12,420
Former policeman yearly income with bonus (1 Min bonus hit + 1 Max bonus hit per year)	$31,420
Former policeman active life income (4 years with bonus)	**$125,680**

*Wage stated by colleague "El Javi", Pachico (2011)
~ Min. Bonus per head of "Rosalio" in Grillo (2012)
~ ~ Max. Bonus per head of "Rosalio" in Grillo (2012)
Elaborated by the author

As a comparison point I will also detail the case of Drago, a sicario that worked in the period previous the violent era between 1997 and 2001. To calculate his total active life income, I also had to take some assumptions. Drago stated that most of the hits that a sicario makes are included in his wage and that the monthly payments can vary from $3,000-$50,000 (Reyna, 2011, Chapter 4). I will assume that half of his active life he earned the minimum salary and the last two years he earned the maximum wage, since he scaled up to the highest rankings of the cartel around that time. Drago does not provide detailed information on the bonus payments; he only says that the maximum he got for a bonus was $50,000, but only one time (Reyna, 2011, Chapter 1). I expect that the assumption of Drago earning the maximum wage for half of his active life will more or less show a number that includes the bonus payments he got along the way. Under these assumptions, the total income earned during his active life was of $2,544,000. He states that by now he has lost all of his money and that he ended up washing cars to survive (Table 23).

Table 23. Drago: Former state policeman wage-earner (period 4)

Min Monthly wage (for 2 years)	Max monthly wage (for 2 years)
$3,000	$50,000
Active sicario life (years)	**Voluntary/Coercion/Persuasion**
4	Persuasion

Drago yearly income first two years	$72,000
Drago yearly income last two years	$1,200,000
Drago active life income (4 years)	**$2,544,000**
Drago yearly average income	$636,000

Source Reyna (2011), Confessions of a sicario (2010)
Elaborated by the author

I applied the same analysis of the previous section but now with each individual case (Table 24). For the case of Ángel, the results coincide with the ones in the previous section. Being a Mexican Direct sicario represents getting the lowest total income of any other kind of sicario. A Mexican without basic education (such as Ángel) will earn similar returns in 10 years of working.

The case of Rosalio represents almost a ten time higher total income than the case of Ángel. This was expected since Rosalio had a US passport that serves as an asset for cartels. From the age of Rosalio when he was recruited (14 years) I will assume that he had an education around incomplete and complete secondary. Comparing the results with the average young Mexican with the same level of education the total income is considerable high (more than 30 years above the threshold). However, an average Mexican adult with middle education will be able to reach Rosalio total income in less than 50 years not to say that Rosalio might have had a higher income by joining the average labour force in a developed country like the US. None of the cases require more than a 100 years of work to earn the same income (they are all in the risky area). Considering the higher opportunity cost of being an American citizen, the fact that an average Mexican with middle education can reach a similar wealth and the risks of the job, Rosalio´s total income is not clearly appealing for a potential rational sicario.

The case of Zafiro shows similar results to the ones of Rosalio when comparing to the average Mexican. When comparing with the average state policeman the story changes. Even by getting income both from the police and the cartel at the same time, he would have been able to reach the same amount of wealth if he had kept only the city police wage for 23 years. Even assuming that some city policemen like Zafiro get to live a double of active life (8 years), an average City policeman would have been able to earn the same total income in less than 50 years. A potential rational sicario of this type would not have decided to join the cartel considering the risks and the payments. The case of city policemen should be studied with more detail in terms of what other factors influence their decision to join the cartel or if they perform this activity under the threats of their bosses. I intend to do this in further research.

For the cases of a higher ranked officer such as a state policeman the decision seem to be more rational. An average state policeman would need 500 years of work to equalize the total income earned by Sicario 164 ($3,365,200). It should be noticed that Sicario 164 worked also throughout all of period 4, thus, this could have augmented his active life. However, assuming that an average sicario of this type would have a half of active life time (10 years); an average state policeman would still need more than a hundred years to equalize the sicario total income. It is more appealing for a potential sicario of this type to engage in such activities. He could work either full time or at the same time of performing the job, since his wage as state policeman only represents 3% of his total gains.

When comparing with the average officers, the results of Drago are similar to those of Sicario 164. However, while the total income earned by Drago is lower than Sicario 164 his yearly income is much higher. Drago in only 4 years made more than half of what Sicario 164 earned in 20 years. This could be linked to the fact that Drago only worked in the previous period of the violent

era and scaled to better positions than Sicario 164, since he worked full-time for the cartel after leaving the police.

Table 24. Years of work needed to reach a sicario total income (specific cases)

	Ángel case (direct) Active life = 3 years	Rosalio case (direct) Active sicario life = 4 years	Sicario 164 (f. state police) Active life = 20 years	Zafiro (f. city police) Active life = 4 years	Old sicario: Drago (f. State police) Active life = 4 years
Sicario active life income	$18,360	$172,000	$3,365,200	$125,680	$2,544,000
Average wage per educational level in Mexico (16-24 years old)					
Without basic education	9.8	92.2	1803.4	67.4	1363.3
With basic education	8.9	82.9	1622.6	60.6	1226.6
With middle and higher education	6.6	62.2	1217.1	45.5	920.1
Average wage per educational level in Mexico (25-64 years old)					
Without basic education	8.3	78.2	1529.6	57.1	1156.4
With basic education	6.4	59.7	1168.5	43.6	883.3
With middle education	4.9	46.2	904.4	33.8	683.7
With higher education	2.8	26.4	516.1	19.3	390.2
Average wage lowest ranked officer Mexico (min age 18)					
State police	2.8	25.8	505.3	18.9	382.0
City police	3.4	31.9	623.2	23.3	471.1
Federal police	2.1	19.8	387.1	14.5	292.6
Soldier	2.7	25.0	489.1	18.3	369.8

Low risk area (white)= an average Mexican can reach the same amount of wealth than a sicario in less than 50 years of working

Risky area (yellow)= an average Mexican would need more than 50 years and less than a 100 years to raise the same amount of wealth than a sicario

Appealing area (gray)= an average Mexican would need more than a 100 years of work to raise the same amount of wealth than a sicario

Elaborated by the author

5.3.3 Result discussion

Overall, there seems to be a weak economic rationale for Direct sicarios to engage in this activities. This could be for a number of reasons registered in the database. For instance, in the case of sicarios that are forced to work for the cartel, such as Ángel, the reason behind the low returns is quite straightforward since they do not have other choice. Also, the reasons why Ángel was recruited is because his father previously worked for organized crime meaning that there was somebody close that affected his inclusion in the cartel. This is also related with the way that Rosalio became a sicario in the sense of how he was recruited: some of his close ones worked for the cartel and invited him to join them. Even though, the returns of Rosalio were considerably higher than the ones of Ángel they are questionably appealing. Regarding sicarios like Rosalio, the initial incentives that he disclosed to receive from his bosses, such as prostitutes, could have shown that the emotional factor played a crucial role to join the cartel and not only the monetary gain. Incentives of this type have been historically registered since the ancient hired assassins to modern gang members (Abeijón, 2006 and Rubio, 2007).

In the case of former officers there are two different stories. Low ranked officers like Zafiro do not earn a relatively high amount of wealth if they become sicarios. While I do not have details regarding how this type of sicario gets engaged in criminality, I believe there could be two main hypotheses that would be tested in further research. The first one is that Zafiro did not have a choice in joining the cartel, once he entered the police he was forced to comply with whatever he was asked for and if not he was going to get killed. The second one is that sicarios like Zafiro are motivated with other incentives and, taking advantage of their authority, they can gain high quantitates of additional wealth from other type of sources (e.g. extortion or bribes). In the case of higher ranked officers like Sicario 164 and Drago (both former state policemen), they are able to accumulate an amount of wealth that would not have been possible for an average officer in any of the levels analysed. A sicario of this type also has more chances to scale up in the hierarchy of the cartel. The results coincide with other cases registered in the database. For instance, the case of The Big One a former Federal policeman that scaled up to Lieutenant of the Beltran Leyva cartel and worked for organized crime by 15 years. Additionally, Arturo Guzmán Decena and Heriberto Lazcano elite squad soldiers and founders of the Zetas. All of them were sicarios at some point of their criminal lives.

6. Conclusion

The database developed in this paper represents the first step of organizing information on Mexican sicarios. Classifying them helps to distinguish that there are substantial differences between the ones that join directly to the cartel and former officers. For future research, the database could be augmented and used with different approaches.

Factors like low education and unemployment are unlikely to be able to explain the rise of sicarios. The sicarios that reported their education in the database have similar or higher levels than the average Mexican, also, none of them report to be outside of school or without employment before joining the cartel. Additionally, the review of the profile of the inmates sentenced for first-degree murderer point in the same direction.

Calculating the economic returns served as a first step to show until what extent the economic rationale plays in the likeliness of becoming a sicario. The yearly income of both type of sicarios is relatively high when comparing with the average Mexican labourer, policeman and solider. However, once you add the risk variable in terms of the active life of a sicario the story changes.

In the case of Direct sicarios the returns seem to be relatively low. While the results point out that these people might be very low-risk averse and care more on the present than the future gain, emotional or institutional components could be playing a crucial role in their decision. For instance, more than a half of the sicarios that shared information about their background, reported suffering some kind of abuse or having problematic background. It could also the case that the cartel knows how to persuade young men into their lines with initial incentives such as prostitutes or cars like in the case of Rosalio. More research is needed in this direction, especially for those that join voluntarily and by non-coercive persuasion.

In the case of former officers, the returns are relatively high for former high ranked officers (e.g. state policemen). Former officers also have more chances to scale in hierarchy and have longer average active lives. That being said, becoming sicarios is more motivated by the economic returns than in the case of Direct sicarios. Further research is needed in the case of a low ranked officer (e.g. city police), since in this case the results are more similar to the ones of a Direct sicario. More information is needed on how low ranked officers are forced or persuaded to become sicarios.

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Appendix I: Reference classification

Table AI.1 References

Type of reference	Number of references
Newspapers/News cites	31
Published papers	11
Reports	10
Books	11
Magazines	9
Video/Interview/confession	8
Specialized sites	7
Census/government database and sites	4
Other websites	4
Documentary	3
Working papers	3
NGO sites	2
Government department response	2
Index	1
International organization site	1
Total	**107**

Appendix II: inmates from the most violent cities (sentenced and processed)

For both processed and sentenced I discarded individuals that committed their crimes before 2006 (beginning of violent era) and with a final "set free" sentence because of innocence, flaws in the judicial process or any other reason.

Table AII.1 Most violent cities and number of sentenced

Ranking	City where crime was commited	State	Number of sentenced where the crime was commited
1	Acapulco	Guerrero	0
2	Lerdo	Durango	0
3	Nuevo Laredo	Tamaulipas	1
4	Cuernavaca	Morelos	0
5	Torreón	Coahuila	1
6	Tecomán	Colima	0
7	Zihuatanejo	Guerrero	0
8	Iguala de la independencia	Guerrero	0
9	Culiacán	Sinaloa	1
10	Navolato	Sinaloa	0
11	Cuautla	Jalisco	0
12	Temixco	Morelos	0
13	Juárez	Chihuahua	2
14	Monterrey	Nuevo León	0
15	Chilpancingo de los bravos	Guerrero	2
16	Chihuahua	Chihuahua	4
17	Tehuacán	Puebla	0
18	Taxco de Alarcón	Guerrero	0
19	Zacatecas	Zacatecas	0
20	Yautepec	Morelos	0
21	Hidalgo del Parral	Chihuahua	0
22	Victoria	Tamaulipas	1
23	San Juan Bautista Tuxtepec	Oaxaca	0
24	Colima	Colima	0
25	Gómez Palacio	Durango	2
26	Matamoros	Coahuila	0
27	Apatzingán	Michoacán	0
28	Villa de Álvarez	Colima	0
29	Delicias	Chihuahua	0
30	Ahome	Sinaloa	0
31	Cuauhtémoc	Chihuahua	1
32	Durango	Durango	0
33	Oaxaca de Juárez	Oaxaca	0
34	El Salto	Jalisco	0
35	Jiutepec	Morelos	0
36	Apodaca	Nuevo León	0
37	Juárez	Nuevo León	3
38	Mazatlán	Sinaloa	0
39	Manzanillo	Colima	0
40	Chilapa de Álvarez	Guerrero	0

# Sentenced of top cities	**18**
Total no. sentenced	59
Percentage of total sample (sentenced)	**31%**
# Selected Cities from the top 40	**10**
Total cities of whole sample	31
Percentage of total sample (cities)	**32%**

Regarding sentenced individuals (Table AII.1). There are 18 people that received a sentence in 2012 and which committed their crimes in 10 of the top 40 most violent cities in Mexico. This represents a 31% of the total sample of sentenced accused of homicide and 32% of the total of cities the cities in which these individuals committed their crimes.

Table AII.2 Most violent cities and number of processed

Ranking	City where crime was commited	State	Number of processed where the crime was commited
1	Acapulco	Guerrero	5
2	Lerdo	Durango	0
3	Nuevo Laredo	Tamaulipas	2
4	Cuernavaca	Morelos	0
5	Torreón	Coahuila	3
6	Tecomán	Colima	0
7	Zihuatanejo	Guerrero	1
8	Iguala de la independencia	Guerrero	0
9	Culiacán	Sinaloa	0
10	Navolato	Sinaloa	0
11	Cuautla	Jalisco	0
12	Temixco	Morelos	0
13	Juárez	Chihuahua	2
14	Monterrey	Nuevo León	2
15	Chilpancingo de los bravos	Guerrero	4
16	Chihuahua	Chihuahua	0
17	Tehuacán	Puebla	0
18	Taxco de Alarcón	Guerrero	2
19	Zacatecas	Zacatecas	0
20	Yautepec	Morelos	0
21	Hidalgo del Parral	Chihuahua	0
22	Victoria	Tamaulipas	1
23	San Juan Bautista Tuxtepec	Oaxaca	0
24	Colima	Colima	0
25	Gómez Palacio	Durango	1
26	Matamoros	Coahuila	0
27	Apatzingán	Michoacán	0
28	Villa de Álvarez	Colima	0
29	Delicias	Chihuahua	0
30	Ahome	Sinaloa	0
31	Cuauhtémoc	Chihuahua	1
32	Durango	Durango	0
33	Oaxaca de Juárez	Oaxaca	0
34	El Salto	Jalisco	0
35	Jiutepec	Morelos	0
36	Apodaca	Nuevo León	0
37	Juárez	Nuevo León	0
38	Mazatlán	Sinaloa	0
39	Manzanillo	Colima	0
40	Chilapa de Álvarez	Guerrero	0

# Processed of top cities	**24**
Total no. Processed	121
Percentage of total sample (processed)	**20%**
# Selected Cities from the top 40	**10**
Total cities of whole sample	41
Percentage of total sample (cities)	**24%**

Regarding processed individuals (Table AII.2). There are 24 people that were processed in 2012 and which committed their crimes in 10 of the top 40 most violent cities in Mexico. This represents a 20% of the total sample of sentenced accused of homicide and 24% of the total of cities the cities in which these individuals committed their crimes.

Appendix III: comparison between inmates of the most violent cities and the rest (sentenced and processed)

Table AIII.1 Sentenced in 2012 for first degree homicide commited after 2006
First degree homicide, federal offense
Observations: Rest=41, Top=18

Average age when crime was commited		First time in prison	
Top	Overall	Top	Rest
31	30	100%	88%
Male		**Principal (or co-principal) of homicide**	
Top	Rest	Top	Rest
100%	98%	89%	85%
Same city of birth		**Same state of birth**	
Top	Rest (N=31)	Top	Rest (N=40)
28%	26%	50%	55%
Same city of residence		**Same state of residence**	
Top	Rest (N=34)	Top (N=39)	Rest
61%	41%	83%	74%
Literate		**Consumated homicide**	
Top	Rest	Top	Rest
100%	90%	44%	67%
Under the influence		**Single**	
Top	Rest	Top	Rest
0%	7%	11%	44%

Regarding the first set of characteristics of sentenced individuals (Table AIII.1). The age when crime was committed is on average in a mature adult stage for both groups, nevertheless, it is not possible to know if that was the first homicide that they committed. Most of them, presumably, are in jail for the first time. As expected, practically all are male for both groups. Regarding their place of birth, only a quarter of both groups committed the crime in the place where they were born. For the case of criminals that committed the homicide in their same city of residence, the number increases to more than half for the group of the most violent cities but it is not as different from the rest. Almost both of the whole samples contain literate individuals; (more on this in Table AIII.3). Most of the individuals were reported to commit their crimes without the influence of alcohol or other drugs. A potential significant difference is that the group from the most violent cities report to be married or being a part of a relationship, while almost half of the group of the Rest is single.

Table AIII.2 Processed in 2012 for first degree homicide commited after 2006

First degree homicide, federal offense

Average age when crime was commited	
Top (N=24)	Rest (N=96)
27	31

Male	
Top (N=24)	Rest (N=96)
96%	94%

Same city of birth	
Top (N=23)	Rest (N=76)
57%	21%

Same city of residence	
Top (N=24)	Rest (N=92)
96%	34%

Literate	
Top (N=24)	Rest (N=96)
96%	99%

Under the influence	
Top (N=24)	Rest (N=96)
0%	2%

Same state of birth	
Top (N=95)	Rest (N=24)
83%	36%

Same state of residence	
Top (N=24)	Rest (N=96)
96%	56%

Consumated homicide	
Top (N=24)	Rest (N=96)
64%	42%

Single	
Top (N=24)	Rest (N=96)
17%	38%

Most of the results of the first set of characteristics of the processed (Table AIII.2) are similar to the profile of the sentenced. Except the average age of the group of the most violent cities goes four years down. Also, a much higher share of the Top group committed the alleged homicide in their same city of birth and in the same city of residence.

Table AIII.3 Sentenced Educational level
Top=18, Rest=41

	Top	Rest		Top	Rest
			Technical studies (finished		
None	0%	12%	High School)	0%	0%
	Completed			Completed	
	0%	0%		0%	0%
	Top	Rest		Top	Rest
Preschool	0%	0%	Bachelor	6%	2%
	Completed			Completed	
	0%	0%		0%	100%
	Top	Rest		Top	Rest
Primary	17%	20%	Graduate	0%	0%
	Completed			Completed	
	33%	75%			
	Top	Rest		Top	Rest
Secondary	39%	44%	Non-specified	0%	0%
	Completed			Completed	
	71%	61%		0%	0%
	Top	Rest		Top	Rest
High School	39%	22%	Total completed	50%	59%
	Completed				
	42%	67%			

Regarding the educational level (Table AIII.3). Sentenced individuals, most of them tend to concentrate between secondary and high school education. The latter supports the Rubio (2007) that level of education main not be crucial in criminals to commit a violent crime. For instance, in Mexico the national average of education is 8.7 years (incomplete secondary), and the sample shows a high share of murderers that surpass this average. For the final version of the work I will contrast this with the average level of education of the municipalities and states of analysis to have a more accurate picture.

Table AIII.4 Processed Educational level
Top=24, Rest=96

	Top	Rest		Top	Rest
			Technical studies (finished		
None	0%	1%	High School)	0%	1%
	Completed			Completed	
	0%	0%		0%	100%
	Top	Rest		Top	Rest
Preschool	0%	0%	Bachelor	13%	14%
	Completed			Completed	
	0%	0%		67%	62%
	Top	Rest		Top	Rest
Primary	29%	19%	Graduate	0%	2%
	Completed			Completed	
	71%	67%		0%	100%
	Top	Rest		Top	Rest
Secondary	38%	39%	Non-specified	0%	0%
	Completed			Completed	
	67%	81%		0%	0%
	Top	Rest		Top	Rest
High School	21%	25%	Total completed	67%	73%
	Completed				
	60%	71%			

The results of the educational level of the processed that significantly differ from the sentenced population are (Table AIII.4): there is almost half of individuals that went to high school, nevertheless, most of them completed their studies. It is also interestingly that for both groups there are individuals with bachelor education and most of them completed it.

Table AIII.5 Sentenced Occupation (top =18, rest=41)

Economically Inactive	**Top**	**Rest**
	28%	2%
Proffesional	**Top**	**Rest**
	0%	2%
Technician	**Top**	**Rest**
	0%	2%
Education related work	**Top**	**Rest**
	0%	0%
Art related work	**Top**	**Rest**
	0%	0%
Government officials/Manager	**Top**	**Rest**
	0%	0%
Agricultural work	**Top**	**Rest**
	6%	20%
Inspector/supervisor	**Top**	**Rest**
	0%	0%
Craftsman/construction worker	**Top**	**Rest**
	11%	24%
Fixed machinery operator	**Top**	**Rest**
	0%	0%
Assistants and similars	**Top**	**Rest**
	6%	7%
Transportation operators	**Top**	**Rest**
	17%	7%
Administrative coordinators and supervisors	**Top**	**Rest**
	0%	0%
Clerk	**Top**	**Rest**
	6%	10%
Merchants and subordinates	**Top**	**Rest**
	11%	12%
Street worker (e.g. Peddler, merchant, itinerant)	**Top**	**Rest**
	0%	2%
Public service worker	**Top**	**Rest**
	0%	2%
Domestic worker	**Top**	**Rest**
	0%	0%
Protection and surveillance	**Top**	**Rest**
	17%	2%
Non specified	**Top**	**Rest**

Regarding the formal occupation of the sentenced individuals (Table AIII.5). The biggest share (28%) of the Top group reports themselves as economically inactive by the time they committed their crime, which might mean they are students or not looking for a job while the group of the rest report to have some kind of occupation. Interestingly, the share of agricultural workers from the Top cities is much less than for the other group, also in the case of

construction workers. The second biggest occupations regarding sentenced from the top cities are represented by transportation operators and people that work in protection and surveillance. The latter group could have easier access to weapons and have a higher set of skills to commit the homicides. These two occupations are much less represented in the group of the Rest.

Table AIII.6 Processed Occupation (Top=24, Rest=96)

Economically Inactive	**Top**	**Rest**
	4%	10%
Proffesional	**Top**	**Rest**
	13%	5%
Technician	**Top**	**Rest**
	0%	0%
Education related work	**Top**	**Rest**
	0%	0%
Art related work	**Top**	**Rest**
	0%	0%
Government officials/Manager	**Top**	**Rest**
	0%	1%
Agricultural work	**Top**	**Rest**
	8%	8%
Inspector/supervisor	**Top**	**Rest**
	4%	1%
Craftsman/construction worker	**Top**	**Rest**
	25%	21%
Fixed machinery operator	**Top**	**Rest**
	0%	0%
Assistants and similars	**Top**	**Rest**
	4%	3%
Transportation operators	**Top**	**Rest**
	13%	4%
Administrative coordinators and supervisors	**Top**	**Rest**
	0%	0%
Clerk	**Top**	**Rest**
	0%	8%
Merchants and subordinates	**Top**	**Rest**
	17%	7%
Street worker (e.g. Peddler, merchant, itinerant)	**Top**	**Rest**
	4%	3%
Public service worker	**Top**	**Rest**
	4%	3%
Domestic worker	**Top**	**Rest**
	4%	0%
Protection and surveillance	**Top**	**Rest**
	0%	24%
Non specified	**Top**	**Rest**
	0%	0%

Comparing the information of occupation of the sentenced and the processed (Table AIII.6) most of the results differ considerably. The share of the economically inactive decreases substantially for this sample. There is also a representation of people which a Professional job. The share of people that

dedicate to agricultural work and construction workers equalizes for both groups and the share of workers in protection and surveillance goes to zero for the Top group, while in the Rest group increases dramatically.

Appendix IV: road to sicario per cartel

Table AIV.1 The road of a sicario (Los Zetas)

Level of Hierarchy	Name of position	Main activity
Low	Falcon	Supervise/Report/Drug smuggling/gang member
Mid Low	New and Old Cobras (sicario)	Assassinations/Kidnapp/Protection/trained gang member
Medium	New Zetas (high skill sicario)	Kaibil/Former military /high rank tasks/Cobra´s boss
High	Sicario of Lieutenant	Personal sicario/former officer/trust employee
Top	Old Zetas (Lieutenant/commander)	Regional leader
Boss (cartel leader/lieutenant/plaza boss)	Boss	

Source Gómez (2008)

Table IV.2 The road of a sicario in Sinaloa Cartel and Beltran Leyva

Level of Hierarchy	Name of position	Main activity
Low	Falcon	Supervise/Report/Drug smuggling/gang member
Mid Low	Gang sicario	Assassinations/Kidnapp/Protection
Medium	Hit Squad/ Paramilitary (experienced sicario)	Former officer/high rank tasks
High	Sicario Boss/paramilitary force	Leader of armed wing
Top	Lieutenant	Regional leader of cartel
Boss	Leader/Boss	

Source Wikiwand

Table IV.3 The road of a sicario in La Familia Cartel

Level of Hierarchy	Name of position	Main activity
Low	Plaza Operatives (low skilled sicarios)	Supervise/Report/Drug smuggling/murders/gang member
Mid-low	Plaza Chiefs	Boss of operatives
Medium	Regional and Municipal Cells (sicario boss)	Experienced sicario/Former officer/high rank tasks
High	Middle Management	Management of Cells
Boss	Drug Trafficking leaders	Regional leader of cartel

Source Kostelnik and Skarbek (2013)

Appendix V: Overall results for all periods

Table AV.1 Overall results: Direct sicario, all periods

	Results per variable (N=21)	Min	Max
Payment per head*	13	$85	$50,000
Monthly Wage as sicario~	3	$528	$2,000
Starting criminal age	13	11	Early 20s
Active criminal life*	14	Less than a year	22
Active sicario life (years)*	12	Less than a year	22
Age first violent act (murder, rape, kidnapp, torture)*	12	11	At least 22
Presumed number of killings (commited or involved)	9	3	More than 70
Skill (based in number of killings)	6	Low	High
Initial activity and hierarchy in the cartel	14	Falcon (low)	Sicario Boss (Medium)
Latest activity and hierarchy in the cartel*	18	Sicario (Mid-low)	Cartel boss (Boss)
Time to scale to sicario	5	Three months	2 years
Previous Income level (as stated by sicario or document)	3	Poor	Not Poor
Education level	5	Incomplete secondary	Complete High School

~ Because of lack of information in the "Min monthly wage as sicario", the number was taken from Vela (2014) *Elaborated by the author*

*This are the results that would have changed if the sicarios from previous periods were included (see Appendix 3)

Numbers in USD 2015

Table AV.2 Overall results: Former officer, all periods

	Results per variable (N=12)	Min	Max
Payment per head*	4	$5,000	$50,000
Monthly Wage as sicario	3	$655	$50,000
Starting criminal age	8	12	26
Active criminal life*	8	5	Around 20
Active sicario life (years)*	8	2	Around 20
Age first violent act (murder, rape, kidnapp, torture)*	9	13	At least 30
Presumed number of killings (commited or involved)	3	At least 23	250
Skill (based in number of killings)	3	Medium	High
Initial activity and hierarchy in the cartel	10	Falcon (low)	Lieutenant (High)
Latest activity and hierarchy in the cartel*	12	Sicario (Mid-low)	Cartel Boss (boss)
Time to scale to sicario	4	0	3 months
Previous Income level (as stated by sicario or document)	3	Poor	Low middle class
Education level	3	Incomplete High School	Complete High School

*This are the results that would have changed if the sicarios from previous periods were included (see Appendix 3)

Numbers in USD 2015