

How Has Inequality Been a Cause of Violence in Post-dictatorship Brazil?

Samson Hart

This thesis explores the relationship between violence and inequality, beginning with an assessment of the historical context of violence and inequality in Brazil, and a review of the literature on these topics. The thesis goes on to qualitatively assess relevant theoretical frameworks, namely from Amartya Sen on inequality and Johan Galtung on violence, to develop a theoretical understanding of both the concepts of inequality and violence, in order to provide a more focused conceptualisation and a basis for their measurement. Finally, this thesis sets out a quantitative case study analysis of the relationship between violence and inequality in Brazil from 1985-2012, referring to different sources of data. The paper concludes that, given the limitations of the study, the data does not necessarily prove a causal relationship between inequality and violence. It does, however, provide enough evidence to call for the use of redistributive economic policy as a long-term preventative measure of violence.

1. Introduction

1.1 Historical Context

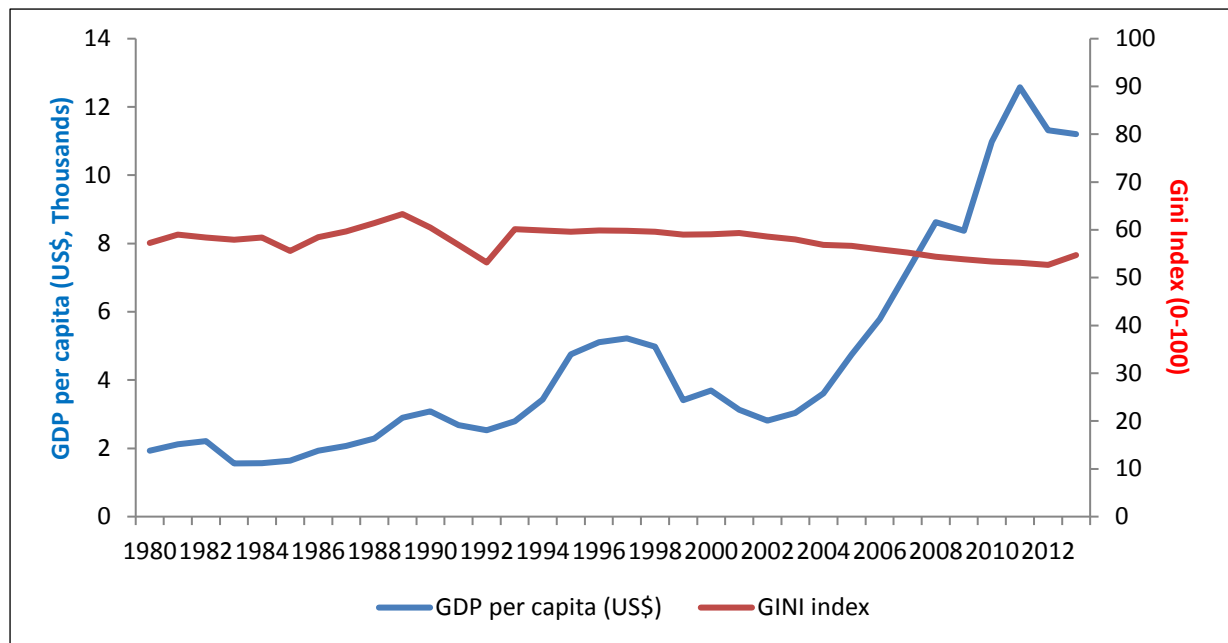
In order to grasp a true understanding of the current problems within Brazilian society, it is important to provide a historical context and explain the political, economic, and societal transition of Brazil in the years preceding the country's democratisation. Brazilian violence is a phenomenon that must be understood from its roots and related back to the historical inequalities that characterise Brazilian society (Richardson and Kirsten, 2005). This section will thus set the scene and explain why the conditions of the past are tantamount to the violence and inequality facing Brazil today.

Latin America has been associated with violence for a long time, and some argue that it has become ingrained into the social structures. Ayers (1998) even describes the existence of a 'culture of violence' within the region. In Brazil, academics have linked the birth of this culture to the violent nature of the Portuguese colonisation (Lockhart, 1983; Kurtz, 2009; Miller, 2006). However, unlike other Latin American countries, Brazil managed to achieve some stability in the mid-19th century, gaining power and wealth through the utilisation of exports in a period of liberalised world trade, leading to a limited democratisation (Smith, 2002).

Brazil went on to pursue an ambitious industrialisation and development policy, which eventually ran into difficulty when the military infamously staged a *coup d'état* in 1964 (Mendes, 2015). This caused widespread institutionalised violence and sparked a long period of state terror in Brazil, reproducing the aforementioned 'culture of violence' (Imbusch *et al.*, 2011). This period was equally important for the intensification of economic inequality within the region. The type of economic policy and political strategy adopted by the dictatorship created a privileged class and neglected the basic education of the masses (Mendes, 2015).

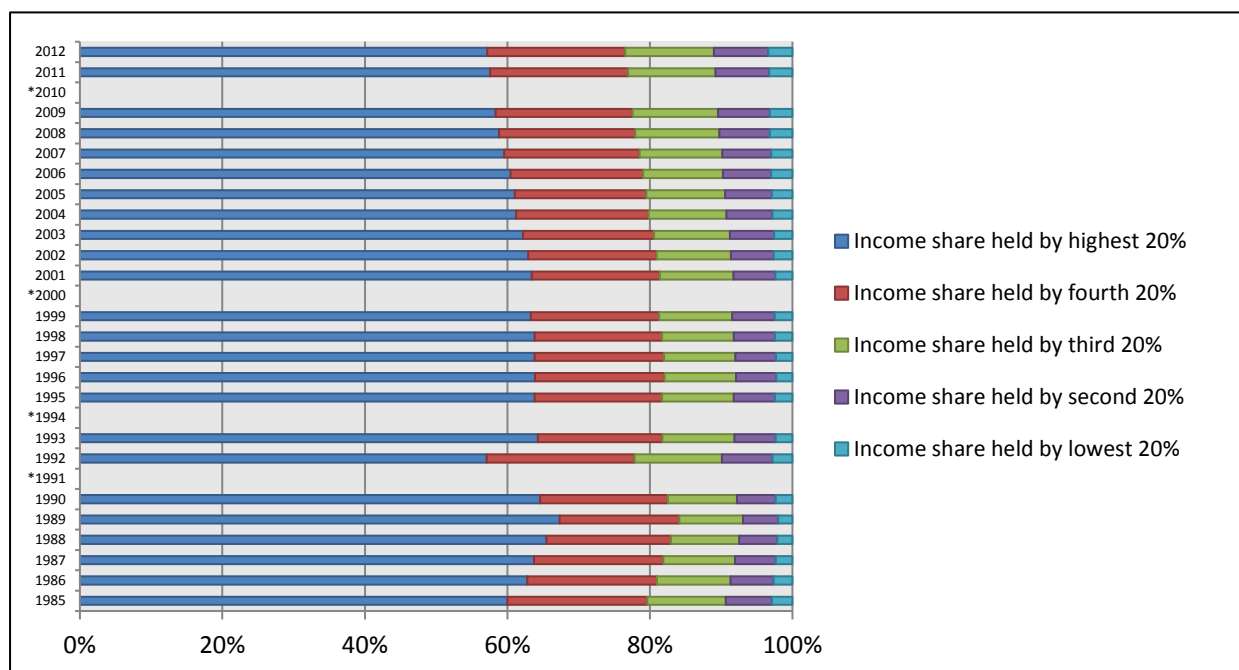
In fact, by the mid-1980s, Brazil was considered a successful case in terms of economic growth, but "a failure in terms of income distribution, social assistance, and poverty alleviation" (Mendes, 2015, p.6). As shown in Figure 1, Brazil's per capita GDP started to rise by 1985, but it had a Gini index of almost 60 (World Bank, 2012a). Further to this, the income share held by the wealthiest 20% was 60% of the total, whilst the poorest 20% only received 2.88% of the wealth (see Figure 2). Additionally, at the time, Brazil had a severely uneducated population, an extremely low life expectancy (64 years), and over 30% of the population was living on less than two dollars a day (World Bank, 2015a).

Figure 1: Brazilian GDP per capita (US\$) and Gini Index, 1980-2012



Source(s): World Bank, 2015a.

Figure 2: Income Share in Brazil, 1985-2012

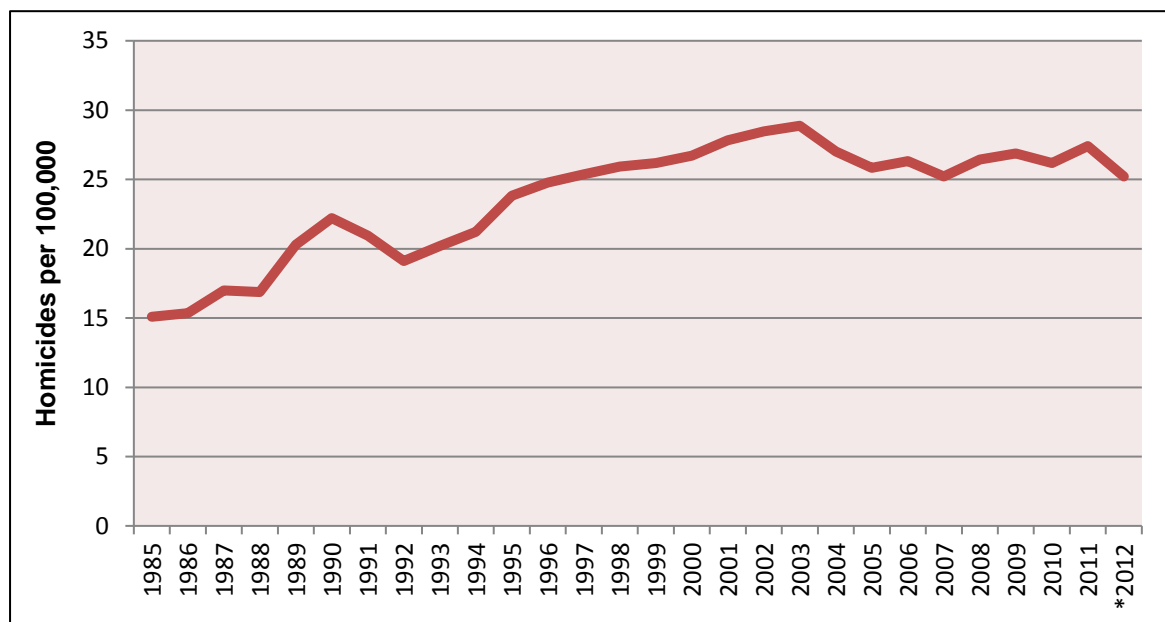


Source(s): World Bank, 2015a.

During the decades of dictatorship, a shift in political and economic policy towards neoliberalism was accompanied by a change in the form of violence. In the past, the violence had been mainly politically motivated, i.e. used to “obtain or maintain political power” (Imbusch *et al.*, 2011, p.89). However, in the 1970s and early 1980s, the political violence of the past decreased, with a movement towards the social, criminal and everyday violence that we are confronted with today (Brysk, 2003).

The transition from military dictatorship to democracy in 1985 brought about further changes to the country's character but, frustrating any expectations, violence in the form of homicide and crime rates have escalated dramatically (see Figure 3). It is estimated that approximately 50,000 people are murdered every year in Brazil (DATASUS, 2012a), which represents only a small part of the much broader scenario of violence that has emerged over the past few decades (Rose, 2005).

Figure 3: Homicide trends in Brazil, 1985-2012



Source: DATASUS, 2012a; *UNODC, 2013.

Democratisation has also done very little to tackle the severe problems of inequality in Brazil, which remains a country with one of the largest disparities between the rich and poor in the world (see Figures 1 and 2). While democracy has led to a redistribution of freedom, power and choice, it does not necessarily follow that democracy will bring a redistribution of wealth and income. This is especially true in Brazil, where the economic elite have a grip on governmental decision, and where great conflict exists between high-income groups that aim to maintain privileges obtained throughout the dictatorship, and low-income groups, who demand a redistribution of income and poverty relief (Mendes, 2015). Whilst the turn of the millennium saw government attempts to redistribute resources to the poor (see Figures 1 and 2), inequality is still rife, the poor are still extremely poor, and it is still the underprivileged groups in Brazil that are the main victims and perpetrators of violence (Ramos and Musumeci, 2005).

1.2 Outline

This dissertation will investigate how these endemic inequalities have been a cause of the violence in Brazil. Section 2 will critically review the relevant literature on violence and how it relates to inequality.

Following on from this, Section 3 will develop the theoretical perspectives on violence and inequality that are essential to their understanding, both as concepts and in how they relate to each other. Section 4 will outline the case study methodology, its aims, and the motivation and reasoning behind this choice of methodology. The results of the case study will be outlined in Section 5, drawing upon the relationship between income inequality and different measures of violence in different contexts. Finally, Section 6 will conclude the dissertation, tying together the theoretical and empirical aspects in order to outline relevant policy recommendations and highlight the appropriate areas that must be developed for further research.

2. Literature Review

2.1 Introduction

The aim of this Section is to provide a critique and overview of the academic literature that addresses both inequality and violence in Brazil. This Section will thus present the situation of violence in Brazil, and the changes of the academic understanding of violence and its causes. The concentration will be on the violence literature, for its transformation over the past few decades says a lot about the changes in how we have come to understand violence and its relationship with inequality.

There are two factors that must be accounted for in understanding the current state of violence research. First, it is not possible to interpret violence in the same way for different forms. The Israel-Palestine conflict, World War II, serial murders or the urban violence of Brazil are all forms of violence existing in separate contexts (Arendt, 1970), and thus the literature on violence research in Brazil points to an insurmountable number of factors that cause violence in the region. And second, as “no single factor is able to adequately explain the high levels of violence” (Imbusch *et al.*, 2011, p.119), there is significant debate over which factors are the main causes of violence. This section will thus attempt to outline the academic literature in the context of some different disciplines and in relation to different aspects of inequality, before providing a framework that combines these viewpoints into a sociological model.

2.2 Violence as Interdisciplinary

Traditionally, violence was recognised as an issue for the criminologist and treated as a kind of deviant behaviour that deserves punishment, as opposed to a reaction to circumstance or even human nature (Arias, 2006). Some economists agree with this view, and there has been a vast amount of research on the probability of being caught as a large factor in determining levels of violence (Becker, 1968; Stigler, 1970; Ehrlich, 1973). However, there is much evidence that punishment and law do very little

to deter perpetrators of violence. In fact, some argue that the police force in Brazil act as an additional security risk and increase the fear of victimisation (Brinks, 2007; Tulchin and Ruthenburg, 2008). Murray *et al.* (2013) found that nearly 2,000 people were killed by the state police or military in Brazil in 2010 (1.6 per 100,000 of the population), a homicide rate higher than the total in the UK and France. It is clear that strategies used by state police are highly excessive and ineffective. Thus, police reform is an urgent matter, and whilst violence today is largely a criminal phenomenon, understanding violence from a purely criminal perspective is inadequate (Greene and Pranis, 2007; Uildirks, 2009).

Political scientists and sociologists have attempted to analyse the issue of violence within their own research frameworks. They look at the social background of perpetrators, analysing the internal logic underlying particular acts of violence and the political context of those violent acts (Imbusch *et al.*, 2011). The literature on political violence does show links between the sociological behaviour of individuals and their willingness to commit acts of political violence. Some found positive relationships between political violence and inequality in the form of relative wealth, and the tendency of individuals to equate their grievances with such gaps (Nagel, 1974). Others found that violence in the political context was far more related to overall social well-being (Sigelman and Simpson, 1977). Political violence does still exist in Brazil, and is rooted in an exclusionary and non-egalitarian agricultural socioeconomic system. It occurs in rural areas, where structural conflict has existed for many years and has recently brought about new violent movements that are protesting and fighting for land reform and redistribution (Kay, 2000). However, the nature of violence in Brazil has undergone a transformation since the formation of democracy, and whilst violence continues to exist within the context of politics, most forms today are in a social or cultural context (Brysk, 2003).

Due to the large social and economic costs associated with violence and crime, violence is also considered to be a public health or macroeconomic issue. For macroeconomists, the costs associated with violence are detrimental to the economic development of societies. For the public health specialist, violence is considered a pandemic for its socially corrosive characteristics. The literature is in agreement that the high societal costs of violence “far exceed individual consequences and pose considerable costs on the country’s economy and its development” (Briceño-León *et al.*, 2008, p.754). Violence erodes labour through limiting access to jobs, human capital in limiting access to education and health and social capital through reducing trust (Moser and Shrader, 1999; Heinmann and Dorte, 2006; Wilkinson, 2004). Morrison, Buvinic and Shifter (2003) present a typology for the socioeconomic costs of violence in Brazil, and found that the total cost of violence to society is 10.5% of GDP. Whilst this is an extremely high figure compared to the rest of the literature, it is still unanimously accepted

that violence has a devastating effect on Brazil's overall GDP (Briceño-León *et al.*, 2008; Murray *et al.*, 2013; Mendes, 2015; Moser and Shrader, 1999). Whilst this literature highlights the need for policy measures to deter violence, it does not entail much about the true causes of Brazilian violence.

2.3 Violence and Inequalities

Research on inequality has come to the forefront in both developed and developing countries and it is no longer mere speculation that economic inequality has a relationship with severe social destruction. Literature that expresses a correlation between inequality and violence is vast within the region of Latin America. There are many economic studies that suggest income inequality, as opposed to poverty, is a large determinant of violence (Fajnzylber *et al.*, 2002; Briceño-León *et al.*, 2008; Portes and Roberts, 2005; Menjivar; 2008). Wilkinson and Pickett (2009) note that countries facing the strongest social inequalities are most likely to have the greatest problems with violence, and severe inequality most likely leads to violence. Newman (1999) backed these claims, proposing that a 1% rise in a country's Gini coefficient is associated with a similar increase in its homicide rate.

Nevertheless, it is important to investigate the intersectional nature of the Brazilian violence phenomenon, in order to truly understand the relationship between inequality and violence in the region. In Brazil, different groups experience violence differently. For low income groups, homicides and physical assaults are far more common than for middle- and high-income groups, who are more likely to be affected by property crime (Imbusch *et al.*, 2011). Brazil's violence disproportionately affects young people, often occurring in the context of gangs, as a way of life to which there are few alternatives (Rodgers, 1999; Jones and Rodgers, 2009; Barker, 2005). In 2009 the homicide rate in Brazil was 62.5 per 100,000 people aged 20 to 29, a figure much higher than in any other age group (Murray *et al.*, 2013). Within this form of gang violence, it is also males that are most effected, and the homicide rate is usually ten times higher than that of women's (Krug *et al.*, 2002; PAHO, 2006; Murray *et al.*, 2013). Finally, rises in Brazilian homicides are also related to race, as Goldstein (2003) found that victims of violence have a tendency to be black. Hence, the literature expresses a need to understand that there inequalities in how violence affects different people.

The literature also articulates that, in the urban setting, violence is far more common, and urbanisation and rapid migration to the cities has had a large effect on the recent upsurge in violence (PAHO, 1996). These changes in patterns of urban criminality, since the mid-1970s, have led to many different interpretations. However, it is greatly accepted that urbanisation is interlinked with the creation of severe social inequality, leading to exclusion, frustration and violence (Concha-Eastman,

2001; Briceño-León, 2005). In essence, the literature shows that if you are a young, black male living in an urban, low-income neighbourhood in Brazil, it is likely that you will be a victim or perpetrator of violence.

2.4 A Framework to Understand Latin American Violence

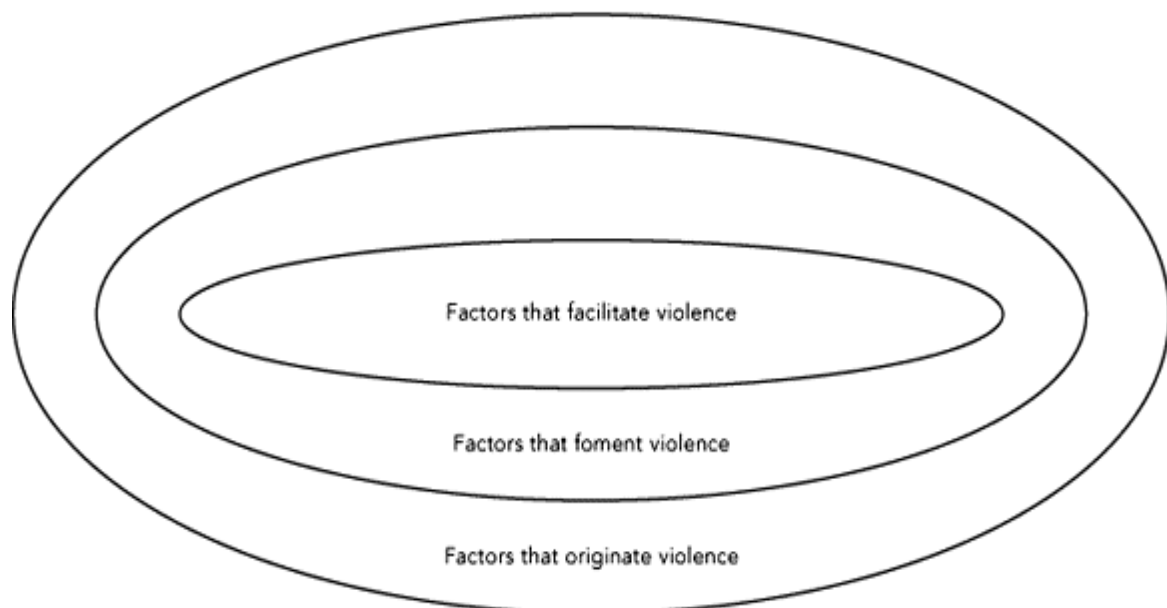
The literature has shown that attempting to understand violence as something measurable and treatable with simple remedies is too simplified. In order to understand and treat violence we must recognise the social ecology that exists within societies and we must be able to categorise different risk factors in order to expose the root causes of violence in Brazil. The literature expresses the importance of understanding violence as a dynamic process involving many actors with many different causes and consequences. This is captured well in a model which classifies risk factors and, whilst many of these models are suggested in the literature (WHO, 2002; Moser and Shrader, 1999; Concha-Eastman, 2001; Bandura, 1973; Reiss and Roth, 1993), they fail to come to terms with the multifaceted and subjective nature of Latin American violence.

In order to truly understand the Latin American violence phenomenon, it is important to use a model that is created purely to do so. Briceño-León's (2005) sociological model is not a universal explanation for violence, but rather a model that has been developed to provide an explanation for current violence in Latin America. The model is an interdisciplinary approach to the violence phenomenon that recognises the contribution of many different explanatory proposals, sharing aspects with all of them (Briceño-León, 2005). Briceño-León (2005) illuminates a framework that identifies three separate levels on which Latin American violence operates. As shown in Figure 4, each of these levels covers the next, encompasses it, and contributes to its conception.

The first level, factors that originate violence, is structural, and it refers to the processes that are created and sustained over a long period of time. These factors do not necessarily determine what occurs, but they are the social and cultural characteristics that create the basis for violent behaviour to persist (Briceño-León, 2005, 2006; Briceño-León *et al.*, 2008; IDB, 1999). This level includes factors such as a lack of employment opportunity for young people, or a heightening in expectations without an ability to meet them, thus, they are characterised by extremely pervasive inequalities. Secondly, factors that foment violence refer to the meso-social influences that have more immediate effects on behaviour. This includes aspects of Latin American society, such as an increase in urban density, that promote violent action within a framework already characterised by the factors from which violence originates. Finally, there are factors that facilitate violence. These are not necessarily direct causes but

they influence the occurrence or lethality of violence. For example, the social norms that promote alcohol use or the carrying of firearms will have an impact on the quantity of violence occurring, and its lethality (Briceño-León, 2005; Briceño-León *et al.*, 2008; Murray *et al.*, 2013). Thus, within this model, violence is understood as the product of multiple and overlapping levels of factors, whereby the root causes are inequalities in society.

Figure 4: The Causes of Latin American Violence: A Sociological Framework



Source(s): Briceño-León, 2005, p.1633

To summarise, this section has reviewed the literature on violence, revealing the interdisciplinary nature of the academic understanding of violence, and the limitations of each individual discipline. It has shown the significance of understanding violence using a framework that appreciates the complex nature of the violence phenomenon. This dissertation will attempt to add to the existing body of literature by isolating inequality and assessing its relationship with Brazilian violence in an attempt to decipher the extent to which violence in Brazil is dependent on the inequality of Brazil.

3. Theoretical Perspectives

This section will develop the theoretical understanding of both the concept of violence and of inequality in order to provide a more focused conceptualisation and a basis for their measurement.

3.1 On Violence

The literature review illuminated the interdisciplinary nature of violence, helping to show the difficulties in its conceptualisation and establishing a need to understand the complex relationship

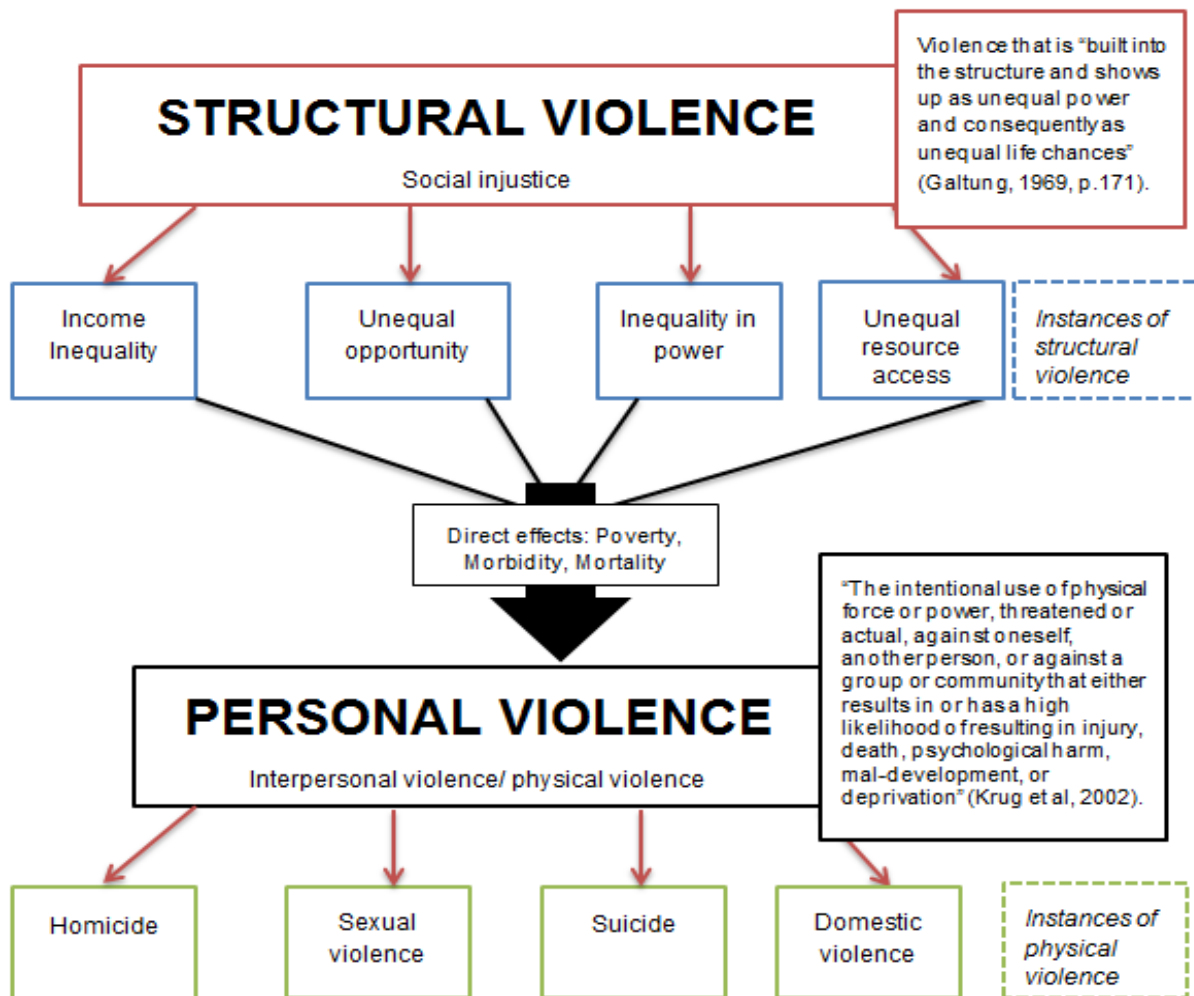
between the different causes of violence. This section will attempt to theorise violence as a concept, because the general understanding of violence is empirically grounded, rather than theoretically conceived.

Georges Sorel's (Sorel, 1906, p.60) admission that "the problems of violence still remain very obscure" continues to have integrity today, and it is widely accepted that violence is a slippery concept that is in need of careful deliberation. Nevertheless, Bourgois and Scheper-Hughes (2004) depict a number of attributes of violence that are integral to understanding its relationship with inequality. First, violence must be understood in relation to human beings as social creatures and thus it is cultures, social structures, ideas, and ideologies that shape all dimensions of violence (Bourgois and Scheper-Hughes, 2004). Secondly, many acts of violence can be misrecognised or sometimes not even viewed as violent at all. For the socially marginalised groups these are instances of disease, starvation and humiliation and, whilst tracing those responsible becomes problematic, the violent nature of these conditions cannot be undermined (Bourgois and Scheper-Hughes, 2004).

In fact, these forms of violence that often go unnoticed tend to occur more often and with more devastation than physical forms of violence. Johan Galtung coined the term structural violence to describe the violence that is not directly inflicted from one person to another. Rather, it is "built into the structure and shows up as unequal power and consequently as unequal life chances" (Galtung, 1969, p.171). Structural violence is the existence of a political economy of inequality under neoliberal capitalism that promotes social suffering (Menjivar, 2008). This political economy will cause poverty and mortality and, whilst it does not directly cause interpersonal violence, it conditions structures within which people resort to inflicting pain on one another (Bourgois, 2004; see Figure 5). For example, in a society where there is unequal access to resources, causing a lack of opportunity for the lower classes, violence is exercised even if there is no traceable actor (Galtung, 1969). For the people in the lower classes, the structures of poverty and inequality that they receive is the true violence, and their crime, delinquency and personal violence is merely a manifestation of these structures (Minayo, 1994).

It is important to understand that Galtung uses different terminology to express essentially the same thing. Galtung (1969) explains that structural violence is synonymous with social injustice and, principally, with inequality. Thus, when talking about the relationship between inequality and violence, we are really talking about the relationship between structural violence and personal violence, or the effects of social injustice on interpersonal violence (Galtung, 1969).

Figure 5: The Relationship between Structural and Personal Violence



Source(s): Author

The writings of Hannah Arendt (1970) also recognise the invisible nature of these forms of violence through untraceable domination. She describes the existence of a bureaucracy in which nobody can be held responsible, and this issue is "amongst the most potent causes of the current world-wide rebellious unrest, its chaotic nature, and its dangerous tendency to get out of control and run amuck" (Arendt, 1970, p.39). The severe social unrest and eventual violence amounts from the fact that those who stand to lose in a situation of inequality have nobody to blame, married with the existence of a natural human "disinclination to have power exercised over themselves" (Mill, 1861, p.65). Throughout history, where the repressed and marginalised are confronted with outrageous conditions or events, resorting to violence is tempting because of its intrinsic imminence and speed (Arendt, 1970).

These theories help to explain why the daily expressions of violence in Brazil are "linked to the broader structures of inequality that promote interpersonal violence" (Menjivar, 2008, p.7). This dissertation

will attempt to provide empirically grounded evidence for this relationship, and add to the credibility of the theoretical perspectives. Any attempt to neglect structural violence, in a region with “profound social inequalities and important class and race cleavages, with strong discrimination and social exclusion, with extreme wealth and extreme poverty” (Imbusch *et al.*, 2011, p.89) would be to misunderstand the violence phenomenon entirely. Thus, it is of great importance to acknowledge the relationship between physical or interpersonal violence and structural violence, for they are in many ways interwoven.

However, when coming to measure violence against inequality, we refer to its physical and traceable forms, i.e.:

“The intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community that either results in or has a high likelihood of resulting in injury, death, psychological harm, mal-development, or deprivation” (Krug *et al.*, 2002, p.5).

This definition is suitable, as it distinguishes between the measurable and the immeasurable. In accepting that “the general formula behind structural violence is inequality” (Galtung, 1969, p.175), finding a relationship between personal forms of violence, such as homicide, and inequalities, such as income inequality, will illuminate the true causes of violence in Brazil to be the structures of inequality in society.

3.2 On Inequality

However, the complexities of inequality must also be considered, for there are many different inequalities that exist in societies, and there is much debate about the appropriate choice of space in which inequality should be measured.

Amartya Sen is a principal writer on matters of equality and his writings have been influential to the understanding of inequality and how it should be measured. He explains that the early writings on the national accounts¹ and economic prosperity strongly reflect the Aristotelian principle of a need for the assessment of the causal influences on the conditions of living (Sen, 1997). In fact, the foundations of economics were focussed on the quality of life, rather than income or wealth. Sen articulates this, stating that:

¹ These are the first estimates of national income, devised by William Petty in 1665. See Petty, 1899.

“Whilst the national accounts...established the foundations of the modern concept of income, the focus of their attention was never confined to this concept. They were also very aware of the basic issue that the importance of income is instrumental and circumstantially contingent rather than intrinsic and categorical” (Sen, 1997, p.392-393).

Thus, a focus on inequality as an entirely income-based phenomenon is naïve, as income should always be seen as a means to some other end, rather than an end in itself. However, Sen also recognised the shortcomings of measures of inequality that encompass wider scope, and the challenges in finding an appropriate notion of inequality that is “both theoretically adequate and empirically usable” (Sen, 1997, p.385).

The use of mainstream welfare economics for inequality analysis is problematic, for it is concerned with a set of questions that tend to avoid judgements on distribution altogether. In fact, Pareto optimality was essentially designed in order to remove the need for distributional judgments (Sen, 1973). As a Pareto-improvement is defined by a change that makes no one worse off and someone better off, if the poor cannot be made any better without cutting into the wealth of the rich, the situation would be Pareto-optimal, despite the existence of disparity between the rich and the poor (Sen, 1973).

The utilitarian approach is equally frail. Since utilitarianism sees the sum of individual utilities as the ultimate measure of social welfare, rises in overall utilities (or economic growth) that only affect the extremely well-off will be seen as positive. This approach provides a somewhat limited account of individual well-being, for it is simply not enough to have a greater sum of utilities. Additionally, these approaches make no attempt to contemplate the freedom of individuals to pursue well-being, because a person’s utility is not representative of their capabilities to convert resources into functionings, i.e. the valuable activities and states that make up people’s well-being (Sen, 1987).

Thus, Sen calls for a more well-rounded understanding of inequality that goes beyond the mainstream measures, highlighting a need to consider the heterogeneity of human beings and the diversity of variables in terms of which equality can be judged. Human beings are incredibly diverse, both in their personal characteristics (e.g. age, sex) and external characteristics (e.g. income inheritance, natural and social environment), and these diversities play a crucial role in determining individual capabilities to convert resources into functionings (Sen, 1995). These diversities also have an effect on the outcomes of different ways of measuring equality. For example, equality of incomes can result in the

inequality of well-being, due to the existence of human diversities. Correspondingly, a libertarian approach may give priority to the equal granting of liberties, thus automatically rejecting equality in the distribution of income (Sen, 1995).

These trade-offs beg the question: 'Equality of what?'. This is particularly relevant when taking into account the situation of Brazil, where an introduction of equality of liberties through democratisation has been met by widening inequalities elsewhere (Mendes, 2015). It is important to stress that the choice of space in which inequality should be measured will always have an effect on other spaces (Sen, 1997), and thus it is of great importance to recognise the motivation for research in choosing an inequality measurement (Sen, 1995).

As the appropriateness of a particular space is ultimately dependant on the underlying purpose of the evaluation of inequality, the choice of space and selection of particular inequality measures within that space must be made representative of that purpose (Sen, 1995). Notably, the argument for paying attention to functionings in assessing inequalities "must not be seen as an *all-purpose*" (Sen, 1995, p.89) option. The purpose of this dissertation is to establish the extent to which inequality is a cause of violence, and so it calls for the need to use a space in which there exists a quantifiable measure of inequality. Sen recognises this, stating that "practical economics, no less than politics, is that of the possible, and that issue remains even when the need for going beyond income inequality is well accepted" (Sen, 1997, p.390). Thus, as long as there is an appreciation and evaluation of the limited application of income inequality in assessing equality in other spaces, choosing income inequality as a means for evaluation is fair.

3.3 Violence and Inequality: The Inherent Link

If we can also accept income inequality as a form of structural violence, the conclusions of a relationship between income inequality and forms of personal or physical violence, as defined by the WHO (Krug *et al.*, 2002), can add to the credibility of the theoretical literature on these concepts. As inequalities have a tendency to be experienced unilaterally (Galtung, 1969), and as different forms of violence have a tendency to produce and reproduce each other (Bourgois and Scheper-Hughes, 2004; Briceño-León, 2005), a concentration on the relationship between a particular form of inequality and a particular form of personal violence can still have relevance elsewhere. This would also serve as empirical backing for Briceño-León's (2005) theoretical model of Latin American violence discussed in the previous Section, which asserts that inequalities are the true factors from which violence originates.

4. Methodology

This Section will aim to explain and justify the methodology used in this dissertation. First, the focus will be on the choice of a case study as the most appropriate methodology. Secondly, the choice of Brazil as a focus country will be addressed, as well as the reasoning behind choosing 1985-2012 as a time period. Finally, this section will outline the stages of the case study, their aims and the reasoning behind each stage.

4.1 Why a Case Study?

It is appropriate to use a case study when asking a how or why question that focuses on contemporary events over which the investigator has no control (Yin, 2009). In this case, we will be focusing on contemporary patterns of violence and inequality in Brazil, and asking how and why violence and inequality interlink. Case studies are used to motivate research through the questioning, clarification or illustration of existing theory (Siggelkow, 2007). This is appropriate, for the case study will be used to add an empirical element to the theoretical perspectives discussed in previous Sections. A case study also gives the author the opportunity to gain an in-depth understanding of a small number of cases or a specific case (Yin, 2009). Again, this is relevant for we will look at the particular effects of income inequality on specific forms of violence in Brazil.

Critics of case study methodology have argued, however, that case studies cannot provide reliable information about the broader class of phenomena in the area studied (Abercrombie, Hill and Turner, 1984). Flyvbjerg (2006) questions this claim, stating that “the force of example is underestimated” (p.228). Humans learn best from experience, thus, concrete, context-dependant knowledge is of great value to understanding. Case study knowledge is central to human learning (Christensen, 1987), so where proof is impossible, looking carefully at individual cases is the only way to learn something (Eysenck, 1976). Further criticism comes from the claim that case studies tend to have a subjective bias. However, a case study contains no greater bias than any other methodology, and, in actuality, case studies have “a greater bias towards falsification of preconceived notions than toward verification” (Flyvbjerg, 2006, p.237). The conclusions from case studies may well contradict the theory discussed, and thus it is unfair to say that there is a bias towards a particular theory or hypotheses.

4.2 Why Post-dictatorship Brazil?

In deciding on a country for the case study analysis, it is important to find one in which there exist a contemporary focus of inequality and violence. The recent riots in Brazil, a response to the hosting of

the World Cup in 2014, sparked global interest regarding the socially unjust nature of the event. It highlighted the “irreconcilable disparity between the scrummage of corporate interests that follows the World Cup and the concerns of those – citizens, fans, baffled and powerless observers – who form its backdrop” (Ronay, 2014). Additionally, despite a large amount of growth in recent decades, there have been persistent high levels of inequality in comparison with other countries. In 2011, Brazil’s GDP per capita grew to \$11,320, the country’s highest ever GDP per capita, and yet its Gini Index remained at 53.09, a figure far from that of an egalitarian level (see Figure 1). Brazil also makes an interesting case when it comes to violence. Despite a lack of war and conflict in the region, violence occurs at a far greater rate than in the rest of the world, and even than in some countries in which there has been long-term conflict (Murray *et al.*, 2013). The recorded homicide rate (see Figure 2) in 2008 was 29.6 per 100,000 people which, compared to the worldwide average of 7.9 (WHO, 2008), is astounding. Thus, there is great opportunity in Brazil to make strong findings regarding a relationship between violence and inequality.

The overall time period that will be considered in the case study is: 1985-2012. This time period represents the time period of democracy in Brazil, and thus, it will allow for an analysis into the lack of egalitarianism that democracy has brought about, contrary to the beliefs in political economic theory (Barro, 2000). The way in which violence is practiced in Brazil has also greatly changed following democratisation. As mentioned in previous Sections, the political violence of the past became the criminal and every-day violence that Brazilians experience today (Brysk, 2003), a violence that is more inherently linked to an unequal society. Additionally, the availability of data is strongest in this time period and it is essential to have reliable data in case study research (Yin, 2009).

4.3 Outline of Method and Aims

The case study analysis will include a number of stages. The first is to identify the existence or non-existence of a relationship between income inequality and the homicide rate over time. To show this, I will use data taken from the World Bank (2015a) for the Gini Index, and homicide figures from the Brazilian Ministry of Health (DATASUS, 2012a), which is “widely regarded as the most reliable information source on homicides in Brazil” (Murray *et al.*, 2013, p.243). However, one of the largest criticisms of inequality and violence literature is the use of national level indicators where inequalities tend to occur on a more local basis, and where violence (especially in Brazil) is a localised, urban phenomenon (Østby, 2013; Cramer, 2001). The second stage will address this criticism by focusing on the income inequality and homicide figures for individual states.

There is also an issue with using homicide measures alone as an indicator for the levels of violence in Brazil, because the homicide rates only represent a small part of the much broader scenario of violence in the region (Rose, 2005). The next stage will thus, investigate other possible characterisations of violence, using victimisation surveys (Latinbarometro, 2012) and trends in hospitalisations for non-lethal violence (Brazilian Ministry of Health System). Assessing inequality against these figures will provide a much more realistic account of the relationship between inequality and violence in the region.

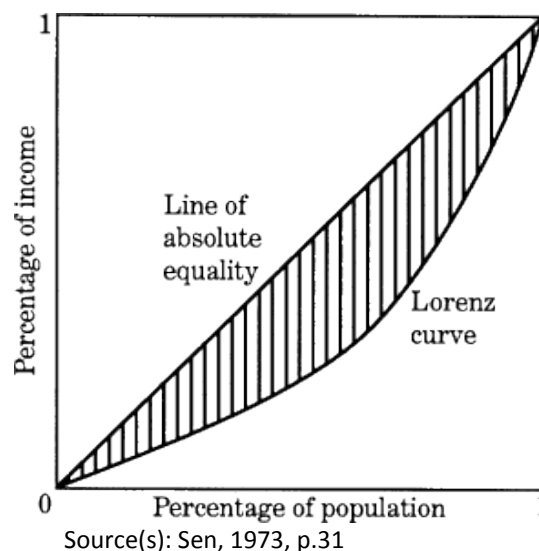
Another large criticism of the literature on inequality and its relation to violence is that other factors that are excluded are truly accountable for the changes in violence rates (Imbusch *et al.*, 2011). Thus, the final stage of the case study will assess the effects of the external variables that are most commonly referred to as causes of Brazilian violence in the literature. These being: population growth, rates of urbanisation, overall GDP and levels of poverty.

5. Case Study: Income Inequality and Violence in Post-Dictatorship Brazil?

5.1 The Gini Index

The Gini index will be used as a measure of income inequality, for it is the most accurate and direct measure (Sen, 1973).

Figure 6: The Lorenz Curve



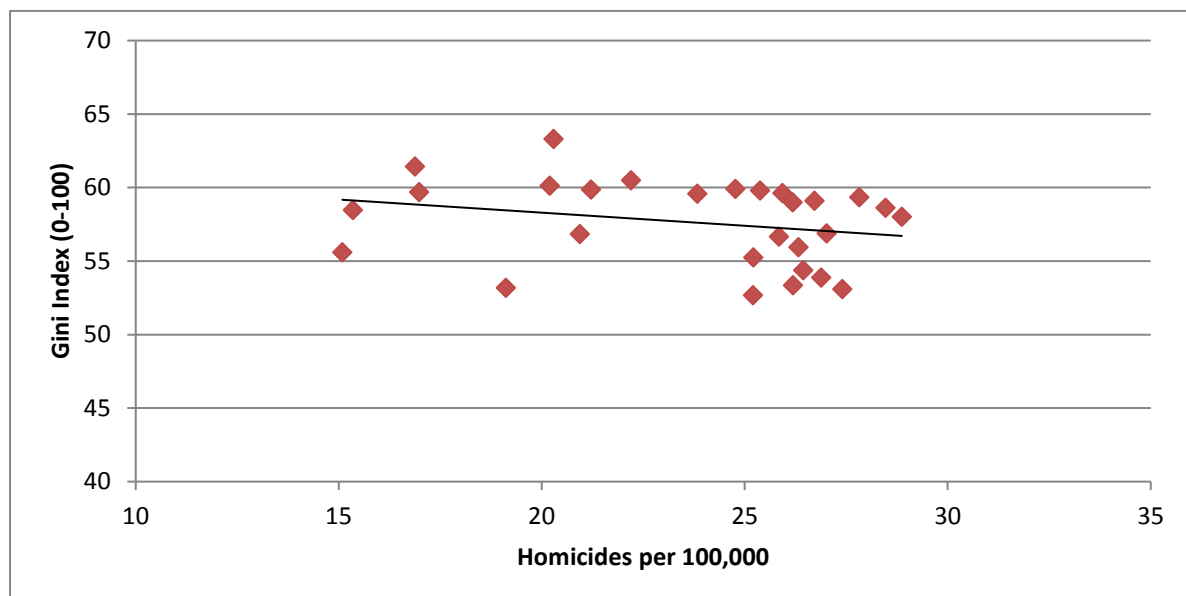
The Gini index can be measured using the Lorenz curve, where the horizontal axis represents the percentages of the population arranged from the poorest to richest, and the vertical axis represents the percentages of income enjoyed by each percentile of the population (Sen, 1973). This relationship

(see Figure 6) is representative of the Gini index, i.e. “the area between the Lorenz curve and a hypothetical line of absolute equality, expressed as a percentage of the maximum area under the line” (World Bank, 2015b, para.1). The data used has been scaled up, whereby a Gini index of 0 represents perfect equality, and a Gini index of 100 represents perfect inequality.

5.2 Homicide Trends and the Gini Index

In order to carry out this stage of the case study, data was collected from the World Bank (2015a) for the Gini coefficients. Measuring these figures each year from 1985 to 2012, alongside the corresponding homicide rates, that being the number of deaths “purposefully inflicted on a person by another person, expressed per 100,000 people” (UNDP, 2015, para.1), provides an indication of the relationship between the two variables as shown in Figure 7.

Figure 7: Gini Index vs. Homicide Rates, 1985-2012



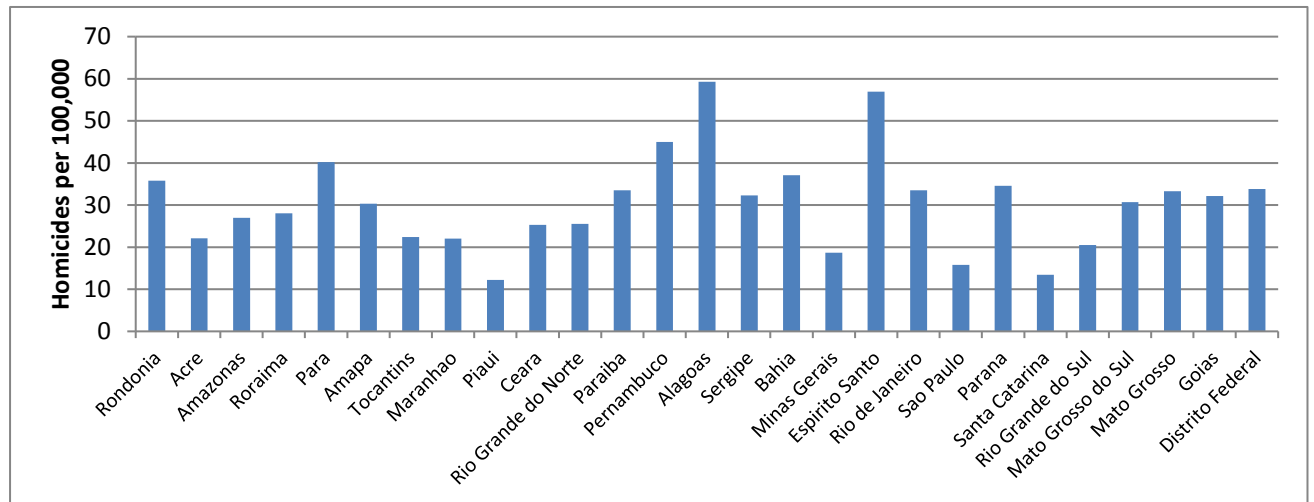
Source(s): World Bank, 2015a; DATASUS, 2012a

Figure 7 represents a slight linear relationship between the rate of homicides and the Gini index. It shows that, contrary to the arguments of the theory discussed in previous sections, where income inequality is higher, the homicide rate is lower. This implies that there is in fact a negative relationship between inequality and violence. However, this relationship is relatively weak and it would be wrong to make these claims purely based on this one set of data. Additionally, this dissertation has expressed the limitations of these measures as representative of the real relationship between inequality and violence.

5.3 Homicide Rates and the Gini Index in Individual States

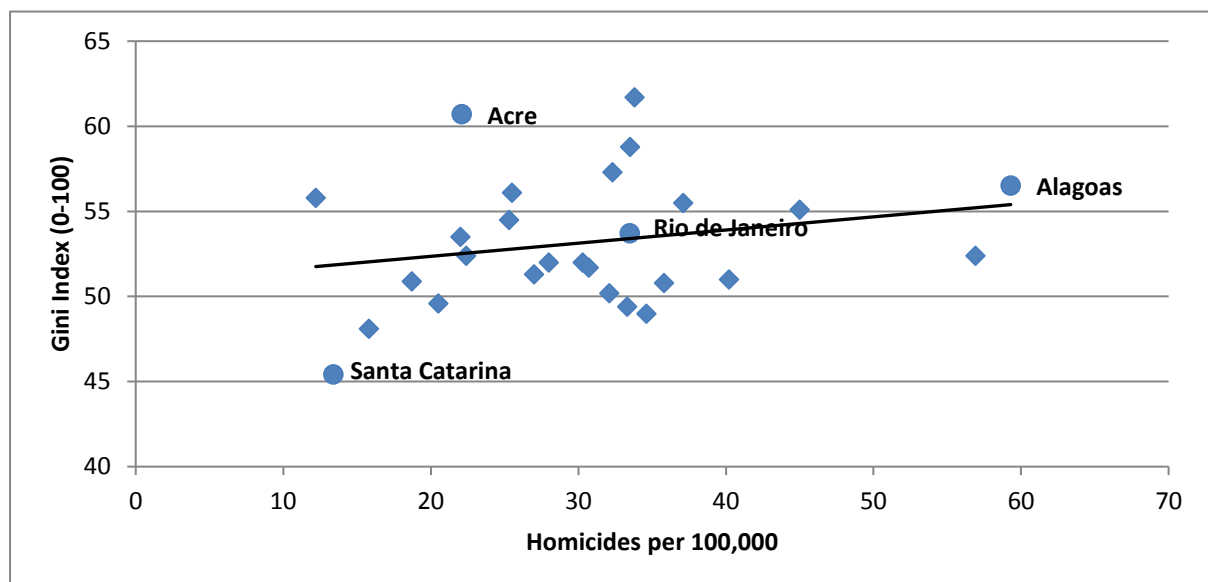
Using the national figures for income inequality and the homicide rates disregards the tendency for both inequality and violence to be localised phenomena. Figure 8 represents the uneven distribution of the rate of homicide in the states of Brazil, indicating that the national homicide rate is unrepresentative of this, and further investigation must be made into the relationship between the homicide rate and Gini index on a local level.

Figure 8: Homicide Rate in Brazilian States, 2009



Source(s): DATASUS, 2012a

Figure 9: Gini Index vs Homicide for Individual States, 2009



Source(s): PNAD, 2012; DATASUS, 2012a

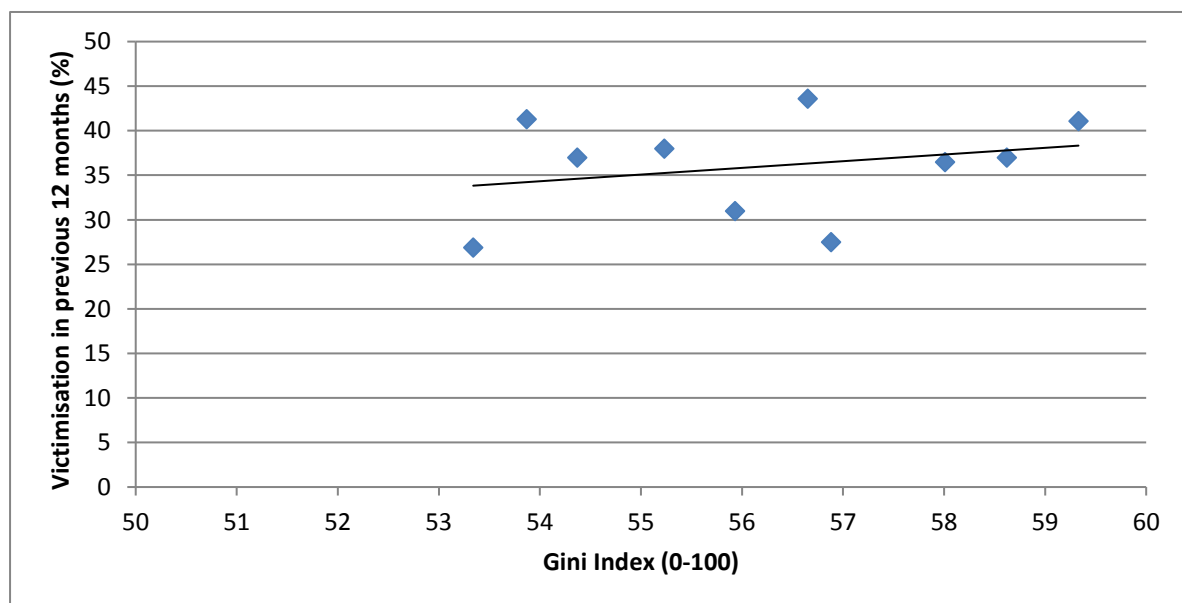
Figure 9 represents the relationship between each individual state's Gini index and homicide rate in 2009. It shows that the states with the higher income inequality generally had a higher homicide rate. This is enlightening, for it indicates that, when accounting for the localised nature of the Brazilian

violence and inequality phenomena, the data shows a positive linear relationship between violence and inequality. For example, Alagoas had a relatively high Gini index (56.5) and a corresponding high homicide rate (59.3), whereas Santa Catarina had a relatively low Gini index (45.4) and a comparatively miniscule homicide rate (13.4). However, some states do not adhere to this trend. Acre, for example, had one of the highest levels of income inequality in Brazil (60.7), but a relatively low homicide rate (22.1). This shows that, whilst there is some empirical evidence here of a causal relationship between inequality and violence, more analysis must be made.

5.4 Alternative Measures of Violence

Homicide rates only represent a small part of the violence in Brazil, thus, this stage will investigate the broader scenario of violence in the region, by analysing the relationship between other measures of violence and the Gini index. First, survey data was taken from the Latinobarómetro, in which participants aged 16 and over were asked: “have you, or someone in your family, been assaulted, attacked, or been the victim of violence in the last 12 months?” (Latinobarómetro, 2012, cited in Murray *et al.*, 2013, p.476). The results are given as a percentage of the participants who answered yes. These data, from the years 2001 to 2010, were then plotted against the corresponding Gini index in order to demonstrate whether or not there exists a correlation between the levels of income inequality and the likelihood of being a victim of violence.

Figure 10: Victimisations in past 12 months (%) vs Gini Index, 2001-2010

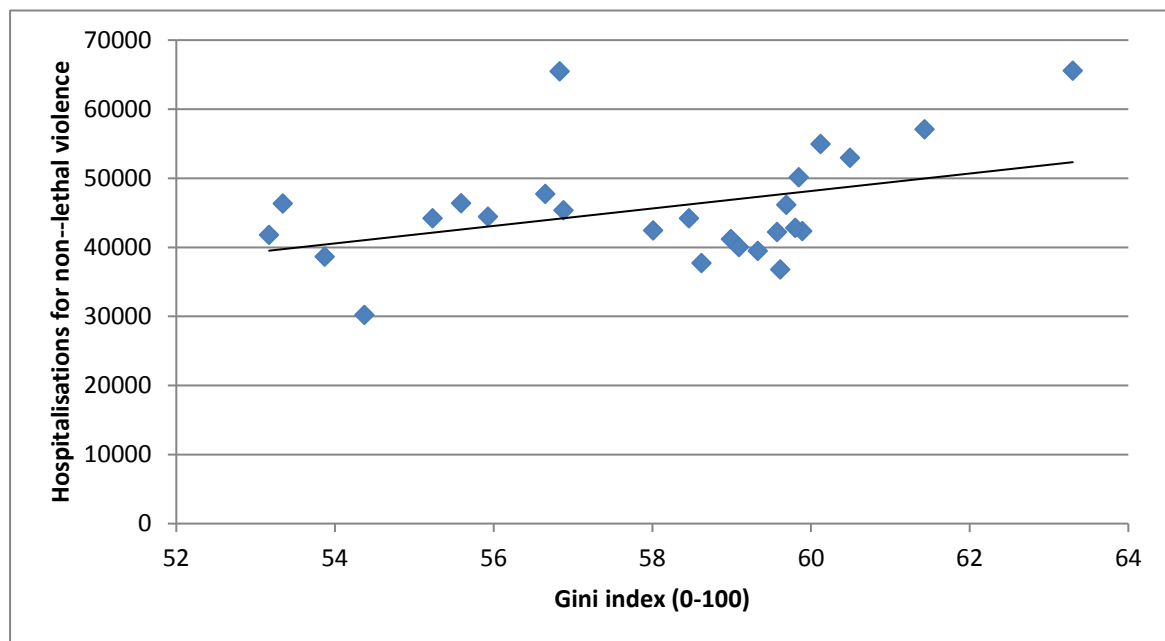


Source(s): World Bank, 2015a; Latinobarómetro, 2012

As shown in Figure 10, there is a positive correlation between the percentage of people who had been a victim of violence and the Gini index. Between 2001 and 2010², in the years when income inequality were greatest, so were the chances of victimisation. Generally, both victimisation and income inequality have been decreasing since the turn of the millennium. In 2010, victimisation rates were at the lowest point in the decade analysed (26.9%), whilst the income inequality was also the lowest in the time period (a Gini index of 53.34).

Second, data on the number of hospitalisations for violence that did not result in death, described as either resultant from assault or aggression, was extracted from the Brazilian Ministry of Health (DATASUS, 2012b). Whilst this is a relatively reliable source of data, it does not include data from private hospital admissions, which accounted for 30% of the total hospital admissions in 2008 (Murray *et al.*, 2013). As shown in Figure 11, there is also a correlation between the number of hospitalisations for non-lethal violence and the Gini index in the years encompassing 1985 to 2010. Generally, in the years with higher income inequality, there are higher rates of hospitalisations for violence and, whilst these figures do not represent the full extent of hospitalisation rates, this finding adds to the credibility of an overall correlation between income inequality and violence.

Figure 11: Hospitalisations for Violence vs Gini Index, 1985-2010



Source(s): World Bank, 2015a; DATASUS, 2012b

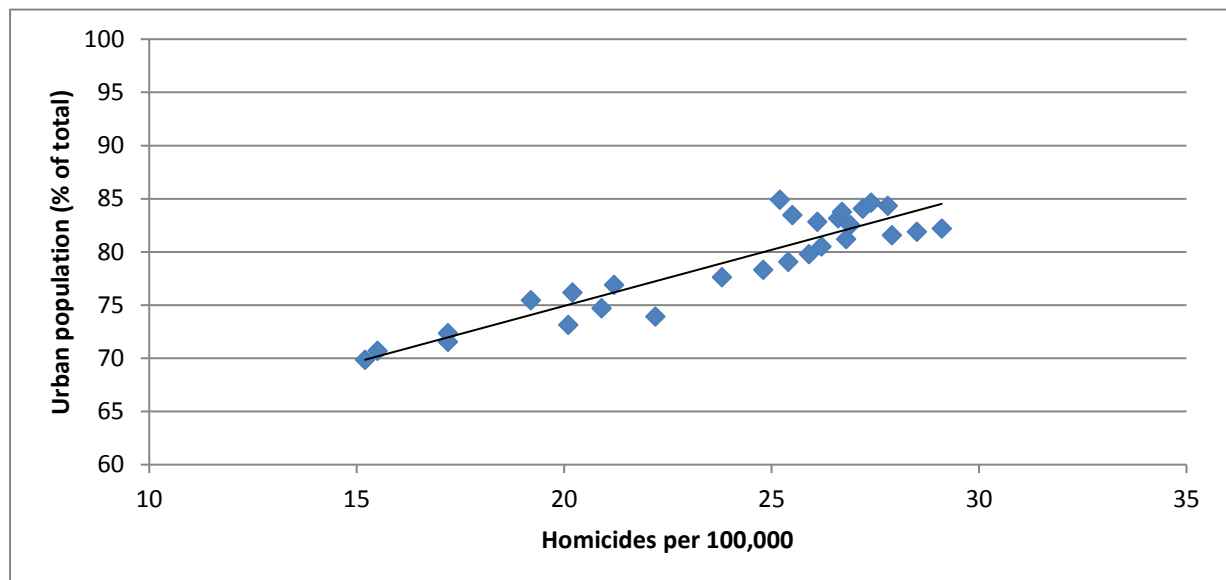
² Data before 2001 used a different sampling framework and was thus excluded.

5.5 External Causes of Violence in Brazil

The literature often refers to relationships between inequality and violence; however, there is also a tendency for the literature to view other factors as truly accountable for the levels of Brazilian violence. This stage will therefore explore the relationship between these external variables and rates of violence. The homicide rates will be used, as opposed to the other violence measures, based on their availability for the whole time period at question.

The population has grown from less than 140 million people in 1985 to almost 200 million in 2012 (World Bank, 2015a). At the same time, the percentage of this population living in an urban area has grown from 69.9% to 84.9%. When comparing the rate of urbanisation to the homicide rate, there is quite a strong correlation, suggesting that the higher the percentage of the population living in an urban area, the higher the homicide rate (see Figure 12). This correlation supports the evidence in the literature that suggests rapid migration to the cities has had a large effect on the upsurge in Brazilian violence (PAHO, 1998; Concha-Eastman, 2001). However, Briceño-León's (2005) model argues that urbanisation merely foments violence, thus it is not a factor from which violence originates (see Figure 4)

Figure 12: Urban Population (% of total) vs Homicide Rate, 1985-2012

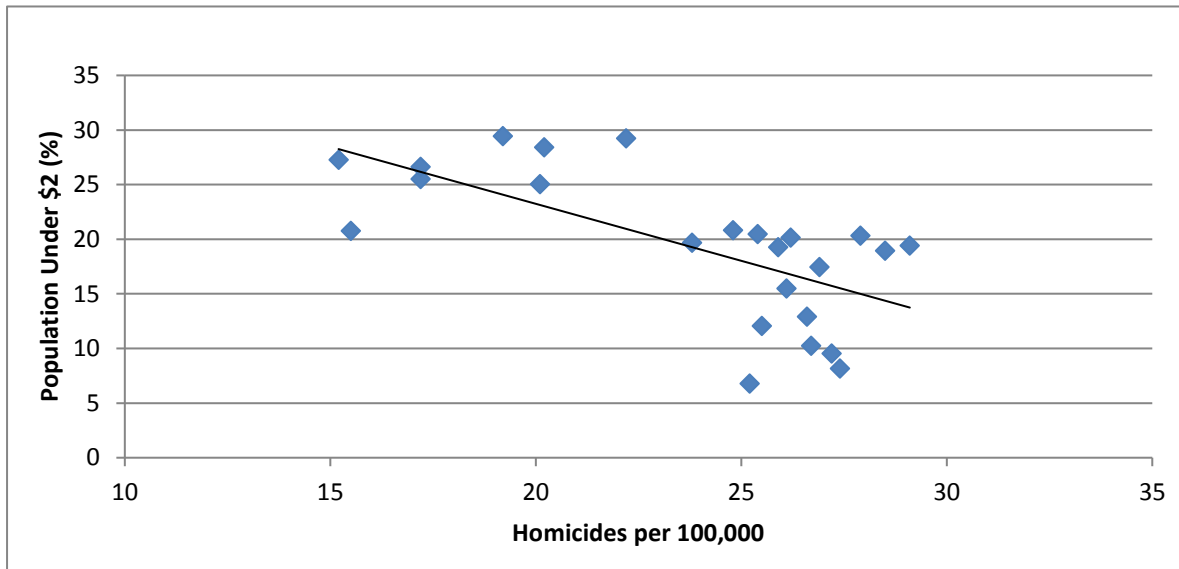


Source(s): World Bank, 2015a; DATASUS, 2012a

The percentage of the population living under \$2 a day has dropped from 27.3% in 1985 to 6.8% in 2012 (World Bank, 2015a). In the same period, GDP per capita has also risen from US\$1,637 to US\$11,320. Figure 13 shows that, when comparing the rate of poverty and the rate of homicide, there is in fact a negative correlation suggesting that, where poverty is lower, violence rates are higher. Whilst this most probably does not indicate a causal relationship, it certainly does not support the

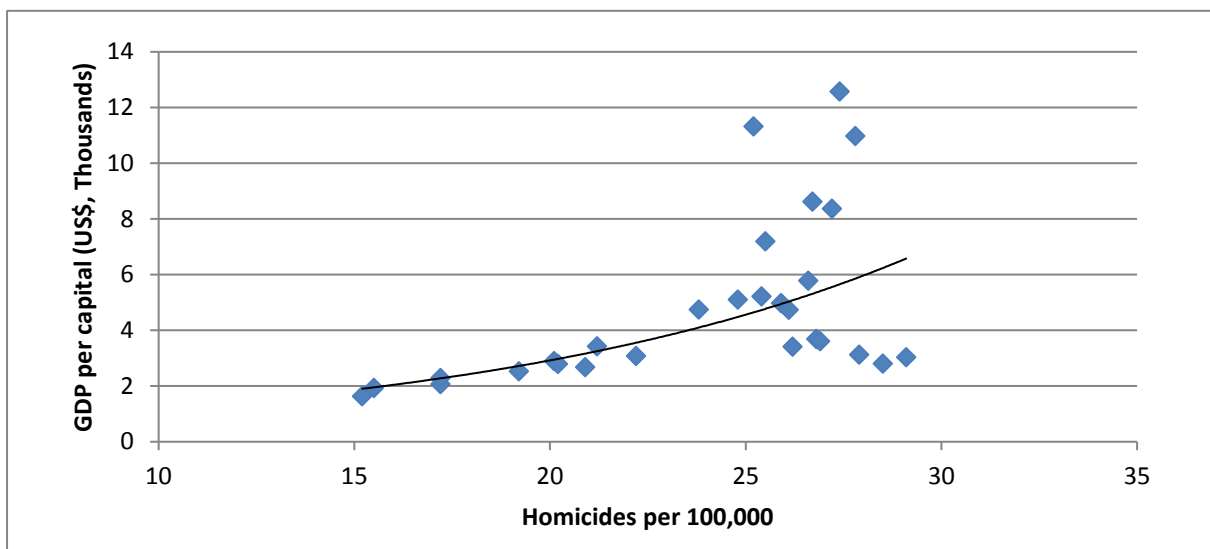
arguments in the literature that suggest the violence of Brazil is a result of absolute poverty levels (Imbusch *et al.*, 2011). Figure 14 shows the relationship between GDP per capita and the homicide rate, suggesting that, contrary to the literature, rises in GDP per capita will not necessarily result in lower homicide rates.

Figure 13: Poverty Rate (%) vs Homicide Rate, 1985-2012



Source(s): World Bank, 2015a; DATASUS, 2012a

Figure 14: GDP per capita vs Homicide Rate, 1985-2012



Source(s): World Bank, 2015a; DATASUS, 2012a

6. Conclusions

The aim of this dissertation has been to investigate and assess the relationship between inequality and violence, particularly in Brazil since its democratisation in 1985. This has been achieved through

the consideration of relevant literature and theoretical perspectives, and the use of a case study approach to identify the impact of changes in income inequality on different forms of violence in Brazil.

6.1 Summary of Findings

The case studies found that, when looking at the national figures on income inequality and their relation to national homicide rates, there is no indication of a positive correlation. However, when investigating the relationship between income inequality and the homicide rate for individual states, there is in fact a positive correlation. Further to this, there also appears to be a correlation between income inequality and other measures of violence, that being number of hospitalisations for non-lethal violence and chances of being a victim of violence. Finally, assessing the relationship between external factors and violence indicated that, whilst urbanisation rates and GDP per capita tended to increase alongside homicide levels, the rate of poverty was shown to be lower where violence is higher.

6.2 Connection to Theory

These findings contribute to the literature primarily through empirical backing of the existing theory. First, they provide empirical backing to Galtung's (1969) theories regarding the true causes of violence and the relationship between structural and personal violence (see Figure 5). Essentially, Galtung's theory states that the existence of a political economy of inequality in which violence is built into the structure of society is what truly accounts for social suffering (Galtung 1969). In Brazilian society, where there is severe income inequality, the lower classes have less opportunity and are conditioned into structures within which they resort to inflicting personal violence on one another. Thus, the key finding of this dissertation, i.e. that there is a relationship between forms of personal violence and income inequality, discerns the true causes of the Brazilian violence phenomenon to be the structures of inequality in society.

Additionally, whilst critics of case study methodology question its ability in aiding the understanding of the broader class of phenomena they underestimate the power of example and the truth that humans learn best from experience (Christensen, 1987). Sen (1995) was well aware that there must be an understanding of the tendency for inequalities to be experienced unilaterally, even in accepting the limited application of income inequality to the evaluation of equality elsewhere. Thus, the findings of a relationship between income inequality and violence can still be relevant in assessing the existence of a relationship between other inequalities and violence. Further to this, Briceño-León's model (2005) describes a particular situation of Latin American violence in which inequality largely characterises the factors from which violence originates (see Figure 4). This model would argue that

the finding of a relationship between inequality and violence in Brazil is also relevant to the rest of Latin America.

6.3 Limitations and Recommendations for Further Research

There are, however, limitations to this research method and its results. First, a lack of rigor, in terms of sensitivity to details, may result in some irrelevant details being included, and this slightly lessens the credibility of a correlation. Secondly, the availability of data was relatively weak due to issues in collecting data from a Portuguese-speaking country. There are also several limitations, which highlight issues that could be developed in future research. There is a need for a better and more efficient measure of inequality than the Gini coefficient. A measure that incorporates not just income disparity, but other issues such as the distribution of power and the capabilities of individuals, would be far more representative of the full extent of inequality. Further to this, there is a need for more trustworthy and rigorous measures of overall violence, especially with regards to issues such as domestic violence that are extremely normalised and underreported in Brazil.

6.4 Policy Implications and Final Conclusions

Nevertheless, this research still identifies important implications for policy. As this dissertation argues that violence in Brazil is characterised by inequality, it calls for the use of redistributive economic policy as a long-term preventative measure of violence. It highlights the need for an integrated approach to policy, whereby social issues are intertwined with economic issues. Most importantly, it reveals that the mere existence of political and economic structures of inequality promotes social suffering. The need to challenge this is not just a matter of justice and fairness, it is vital in the pursuit of a better society in which socially erosive forces are limited, and the well-being of all individuals is heightened.

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