ASSESSING THE EFFECTS OF VIOLENCE ON REGIONAL ECONOMIC DEVELOPMENT IN COLOMBIA

By

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Submitted to the Department of Urban Studies and Planning in partial fulfillment of the requirements for the degree of

Master in City Planning

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Chair, MCP Committee Department of Urban Studies and Planning

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ABSTRACT

This study explores whether high levels of violence have affected regional economic growth in Colombia. Prior studies investigating the effects of violence on regional economic development are analyzed and found to have narrowly focused on certain areas in Colombia, and only during short periods of time. In contrast, this study investigates this issue during three periods: 1) 1938-1959; 2) 1960-1975; and, 3) 1980-1997 to provide not only an economic and historical framework but also to see whether there is a development pattern among the regions that exhibit high levels of violence and economic growth. For each of the periods, homicide rates for each of Colombia's departments are used as a variable to measure levels of violence, and departmental GDPs and sector variations are used as a measurement of economic growth. Results reveal a positive relationship between violence and economic growth when the region is experiencing an economic boom. The different types of actors and institutional arrangements that were involved in the exploitation of economic activities that allowed a dynamic growth for the region are further explored. Moreover, the "cause and effect" relationship between violence and economic activities that allowed a dynamic growth for the region are further explored.

Thesis Supervisor: Diane E. Davis Associate Professor of Political Sociology

Wilson clan, Josh Lawrence, Catherine Michener, Becky Bartel and family, Nelly Wadsworth, Sarah Dietrich, and Antoinette Leoney.

Thanks to my brothers and sister who constantly reminded me of my past shortcomings and future potential; special thanks go to Rafael and Alejandro who helped me with data gathering in Washington D.C. and Bogotá.

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CHAPTER 1 – INTRODUCTION

1.1 Background and Research Questions

Over the past 60 years, high levels of violence have characterized the development of Colombia. In terms of levels of violence, the average rate of homicide per 100,000 at the national level hovered at 54^{1} annually until the mid-1980's. Starting in 1988 the homicide rate surged to levels between 60-76 per 100,000 people, and in 1997 alone, $25,379^{2}$ people were killed in Colombia. That Colombia has been able to endure such persistent violence without succumbing to a state of perpetual war with all of its devastating consequences is puzzling. Even more surprising, during this period of violence between 1938 and 1997, Colombia's GDP expanded to 15 times its original size, registering an average annual growth rate of $4.46\%^{3}$. During the same period, the population tripled at an average annual rate of $2.5\%^{4}$. Finally, while in the late 1930's 30% of the population was living in urban centers, by the mid-1990's the rate had increased to $70\%^{5}$.

A fundamental issue for scholars of Colombia lies in identifying the causes and evolution of violence, and in recognizing external factors that might have fueled its continuity. As a result, theories about the causes for the appearance and recurrence of this violence abound. Yet, a systematic examination as to the effects of violence on

¹ I have used records from the Anuario General de Estadística for 1938-1975. For all information after that, the data comes from either the Colombian National Police and/or The National Department of Statistics, DANE.

 ² DIJIN-CIC (Centro de Investigaciones Criminológicas), Revista Criminalidad, Policía Nacional.
 ³ My own calculations using data from "Estadísticas Históricas de Colombia." Unidad de Análisis

Macroeconómico-DNP, pages 3-4, TM Editores, 1997.

⁴ 50 Años de Economía: De la Crisis del treinta a la del Ochenta, Carlos Caballero Argáez

⁵ My own calculations using data from "Estadísticas Históricas de Colombia." Unidad de Análisis Macroeconómico-DNP, pages 249-253, TM Editores, 1997. Anuario General de Estadística 1938-1950. República de Colombia, Contraloría General de la República, Dirección de Estadística. Imprenta Nacional. Colombia.

economic development does not exist. Indeed, while there is ample analysis of the specific causes of violence, the study of its consequences for the economy is both limited and fragmented. To be sure, prior studies have concentrated on the effects of violence in the agricultural production for a specific period of time or crime and economic growth at the national level; econometric studies have sought to establish a relationship between economic growth and crime (Bejarano, 1997; Rubio, 1995, 1999; Montenegro and Posada, 1995). But, Colombia has not incorporated the same set of actors throughout the years, nor has violence been localized in the same regions. Accordingly, it is surprising that few studies have examined the relationship between violence and regional economic development, and whether the relationship is positive or negative and why.

This study attempts to fill this gap in the literature. It contributes by examining the effects of violence on economic development at the regional level in a systematic and chronological manner from 1938 until 1997. It hopes to provide useful insights to all researchers interested in a deeper understanding of the relationship between violence and economic development by addressing the following questions: 1) How has it been possible for Colombia to grow economically while sustaining high levels of violence? 2) Has the relationship between violence and economic development between violence and economic development been the same thorough the country, or do regions differ from each other on this account? 3) If so, have those regions lagged in their economic development and what are the economic characteristics of the regions that have experienced higher levels of violence? And, 4) Do regional patterns offset the nature and character of Colombia's overall economic growth?

The studies that examine the relationship between violence and economic growth are characterized by the theme that violence deters economic growth. In support of these

claims, the literature analyzes the intensity, duration, and localization of the conflict and then relates it to economic growth, mediated by macroeconomic structure and societal imbalances. Rubio (1995) argues that the high and growing criminality has permanently affected the potential of economic development in Colombia, and that economic development requires a non-violent institutional environment where property rights are respected. This approach is consisted with that of North (1990) who argues that institutions that have established incentives to create and enforce efficient property rights are responsible for determining the economic performance of a society. If conflict undermines the strength of the institutions that protected property rights, the growth of the economy is then weakened. Moreover, it is argued that an economy needs social, economic, and political stability to grow and attract investment.

This study will argue that the prevailing view that violence deters economic growth is an overgeneralization and is an incomplete if not inadequate claim in the case of Colombia. Furthermore, this study argues that while conflict might indeed undermine "formal" institutions, it might also contribute to the creation of new, perhaps "informal" institutions that fill the vacuum. These temporary informal institutions in turn, can facilitate the path for economic growth, especially at the level of the region, which in turn has a direct impact on the national economy. Thus, this study will analyze the regions that feature levels of violence and economic growth above the national average. Moreover, it will surmise that reasons for such a positive relationship between violence and economic growth might be explained under the following circumstances: 1) It is possible that the reason that violence does not deter economic growth might be the augmentation of the amount of money circulating in the local economy. Indeed, a region

might experience an economic boom from the benefits of a new source of income, either from the exploitation of natural resources or the influx of drug money. When this circumstance is present then the impetus for growth and for maximizing profits is far greater than the negative consequences of violence. 2) Another possible explanation for the lack of a connection between violence and economic growth could be found in the business climate. If the perception is that violence does not affect the productive system of the regions, then there is no reason to stop investment and capitalization in the particular region. 3) The next premise combines the economic boom explanation and the business investment explanation with the argument of this study about the role of "informal institutions." If the economic benefits for the regions are great, and the actors directly involved are benefiting significantly from this wealth it is possible that these beneficiaries are fostering the violence because it will help them to maximize their profits. And, simultaneously, these same beneficiaries could create "informal institutional arrangements" that might guarantee and protect access to the wealth, and facilitate the path for the economic growth of the region.

1.2 Design of the Study

This study examines the regions in Colombia that featured levels of violence and economic growth above the national average and explores their underlying characteristics. Furthermore, it analyzes the role of institutional formations such as land ownership, political parties, class structure, mafia, etc., in determining the effects of violence on economic development. The implication of the analysis suggests a

reexamination of much of the literature of the relationship between violence and economic growth, particularly those that conclude that violence deters economic growth.

The examination of this research has been divided into three periods: 1) 1938-1959; 2) 1960-1975; and, 3) 1980-1997 to provide not only a framework for economic and historical understanding, but also to see whether there is a development pattern among the regions that exhibit high levels of violence and economic growth. For each of the periods, homicide rates for each of Colombia's departments are used as a variable to measure levels of violence, and departmental GDPs and their sectors' variations are used as a measurement of economic growth.

As such, the main characteristic of the economic nature of the first period (1938-1959) could be summarized as a great intervention on the part of the government to foster industry and to boost the production and export of coffee. As discussed previously, it is possible that the reason the regions with high levels of economic growth feature high levels of violence might be that actors benefiting from the economic growth are fostering the violence. Indeed, for this period LeGrand (1992) has argued that agrarian struggles starting as early as the late 19th century resulted in the concentration of highly desirable land in the hands of few, and a guaranteed source of landless wage labor was secured by the territorial dispossession. Likewise, Bergquist, (1992) has argued that in the coffee regions at a time when coffee exports were the most important source of revenue for the Colombian economy, the struggles for land and social mobility by the coffee workers are key to understanding the widespread violence.

The second period (1960-1975) encompasses the years when the country followed the import substitution model for industrial development. In terms of socio-political

characteristics, this period experienced an aggressive movement for the colonization of frontier land and the appearance of guerrilla groups. This "armed colonization" was the process in which those who had lost their land during the conflicts of the 1930s and 1940s joined independent armed groups that were colonizing new land (Molano, 1992). As this study will show, two departments, Meta and Cesar, which featured levels of violence and economic growth above the national average, experienced the armed colonization. Moreover, in terms of political developments, this period featured the *Frente Nacional* or National Front, an undemocratic configuration that consisted of the agreement between the two main party elites to alternate the presidency and the sharing of power and government at all levels. The dynamics of these institutions are further analyzed to see how their behaviors might have played an important role in the economic outcome of each of the regions that featured high levels of violence and high economic growth.

The last period analyzed, 1980-1997 can be summarized as a period that experienced economic crisis, market liberalization and the influx of drug money into the national economy. Access to rich lands and territorial control, not only politically but economically, continued and worsened during this period. Indeed, in their quest to control sources that generated wealth, paramilitary groups, guerrilla groups, drug mafias, and the state were responsible for the high indices of violence. Yet, as it will be shown, the regions that featured high economic growth and high levels of violence were experiencing an economic boom, and the aforementioned actors played an important role as both culprits of violence and beneficiaries of economic growth.

In summary, this study will show the different types of actors and institutional arrangements that were involved in the exploitation of economic activities that allowed a dynamic growth for the region. Additionally, the study will explore and explain the "cause and effect" relationship between violence and economic growth.

1.3 Methodology

This study assesses the effects of violence on regional economic development for the period of 1938-1997. This evaluation is based on a number of indicators for economic development: GDP growth, structure, characteristics, and participation of the economic sectors at the departmental (state/regional) level. Levels of violence are measured in terms of homicide rates for each of Colombia's departments. Since violence is believed to deter growth, this study explores the economic structure and socio-political characteristics among the different departments that showed high economic growth and high levels of violence in an attempt to investigate whether the specifics of these economic characteristics can explain why they have been able to sustain both growth and violence. Additionally, it analyzes the role of institutional formations such as land ownership, political parties, class structure, mafia culture, etc., in determining the effects of violence on economic development.

For the period 1938-1959 departmental revenues were obtained and organized in constant pesos of 1950 to allow measurement of the economic growth. To measure the levels of violence, the homicide rate for each of the departments was obtained from government documents. It is important to note that these numbers are underrepresented. Nonetheless, it provides the study with a quantifiable variable for the measurement of

violence. For the period 1960-1997, the use of GDP data for each of the departments allowed a more specific analysis of the different economic sectors and helped determine the rate of growth for each of them. The measurements for violence continued to be the homicide rate to keep the uniformity of the analysis. For both indicators, GDP growth and homicide rate, the national average is used as a point of reference for comparison. Additionally, this study has relied on an extensive number of primary and secondary sources in the form of census data, historical documents, sectoral analyses, and a number of studies related to violence in Colombia.

As previously explained, this study is divided into three time periods, each delineated due to its unique political, social, and economic characteristics. As such, a well-defined framework of study is provided. Subsequently, a general overview of the economic development characteristics for the country as a whole highlighting significant developments for each of the periods is introduced. Finally, more specific information about the departments that show high levels of violence and high economic growth is outlined.

Chapter Two reviews the literature on the role of violence in economic development and its effects on the political and social institutions. Additionally, it provides an overview of the research carried out by *violentologos*, or students of violence, as they are known in Colombia. Although most of the attention has been focused on the socio-economics and political roots for the violence, in recent years students of economics have added valuable research.

Chapters 3, 4, and 5 investigate economic development at the regional level starting in 1938, and identify those regions that were able to achieve high levels of

economic growth while sustaining high levels of violence. Of particular interest is the analysis of the type of economic structure of each of those departments as well as the understanding of the institutional formations in each of the departments studied. These chapters postulate that, contrary to the belief that violence impedes economic growth, it is possible to have economic growth as well as high levels of violence. Additionally, they will show that two separate patterns of development have occurred in the periods analyzed, and that by understanding the characteristics of these patterns it is possible to see why some departments, despite their high levels of violence, were able to grow. Finally, chapter 6 presents the conclusions, analyzes their significance, and suggests recommendations for future research.

CHAPTER 2-THEORETICAL CONTRIBUTIONS TO THE STUDY OF VIOLENCE AND ECONOMIC DEVELOPMENT

Although much has been written about violence in Colombia, it was not until the mid-1960's that universities and researchers began studying Colombia's violence and its aftermath in a serious and systematic manner. Since then, new concepts and interpretations have been advanced that challenge and question the "conventional" assumptions about the origins and evolution of violence in Colombia. Moreover, the incursion of economists in the debate surrounding violence in Colombia has encouraged new perspectives that have led to a greater understanding of its multifaceted dimensions.

Indeed, students of the economics of crime and institutionalism offer solid empirical evidence and analysis based on econometric calculations to explain the hypothesis that the growth of crime is caused by the existence of economic incentives to commit violent acts, and that this increment in crime is having a negative effect on the economic development of the country. The contributions of such studies have offered empirical evidence and the discussion of new aspects of analyzing violence with most being related to incentives, individual motivations, and the role of the state in defense, security, and justice expenditures. Other studies explore the origins of this violence and the existence of armed groups and propose that the causes of this violence are rooted in the lack of political and socioeconomic opportunities.

The current debates on the effects of violence on economic development are taking place within three theoretical frameworks: 1) economics, 2) political science, and 3) sociology. Economists are confining themselves in the understanding of the behavior of institutions and the economics of crime to predict the effects of violence on economic development. In this view, the growth crime is caused by the existence of incentives to

commit violent acts which leads to the deterioration of judicial institutions, and as a consequence, deters economic growth (Gaviria, 2001; Montenegro and Posada, 1995; Rubio, 1999; Montenegro et.al, 2001; Posada and Gonzales, 2001). These studies often focus on the expansion of narcotrafficking in Colombia, the collapse of the judicial system, the reorganization of the value system, and the effects of armed groups on state institutions. Contributions of such studies have been empirical evidence and discussion of new aspects of analyzing violence, mostly related to incentives, individual motivations, and the role of the state in defense, security, and justice expenditures. Their treatment, however, of the guerrilla and the paramilitary groups as ordinary criminals, downplay the important role that these actors play in the armed struggle, and any potential peace agreement (Martinez, 2001).

Other studies within the political science framework, also look at the institutions and how their deterioration due to violence has negatively impacted the overall performance of the country. Most of these studies explore the origins of the violence and the existence of armed groups and propose that the causes of this violence are rooted in the lack of political and socioeconomic opportunities (Restrepo, 1992; Corredor, 2001; Machado, 2001). Some of these proponents (Restrepo, 1992; Gomez Buendía, 1991; Tovar Zambrano, 1991) argue that the political exclusion that has existed in the country since the *Frente Nacional*, and the difficulty for social mobility combined with an unequal distribution of wealth are the causes of violence.

On the other hand, researchers within the sociology framework (Molano, 1992; Machado, 2001; LeGrand, 1992; Bergquist, 1992) do not necessarily believe that lack of political and socioeconomic participation are the sole causes of violence; however, they

agree that the aforementioned circumstances do create the conditions necessary for fueling the conflict. These studies are also looking at institutional forms like land ownership, labor relationships, and social classes to understand the effects of violence on economic development. However, advocates of this view fail to explain why poverty and social injustices should necessarily lead to an armed struggle, or why this is happening in Colombia and not in other countries where the social conditions are far worse (Martinez, 2001).

This chapter, will first review 1) the studies of the economic analysis of the violence in Colombia, and 2) related studies in the fields of sociology, and political science.

2.1 Studies from the Economic Perspective

Whatever its origins, a unifying theme of the economic literature on the influence of violence on the economy is that its presence deters growth. Indeed, this literature analyzes the intensity, duration, and localization of the conflict and then relates it to economic growth. Thus, conflict will affect the economy depending on what the economic agents believe about the duration and the overall impact of the conflict.

Although the economic interpretation of the role of violence provides fascinating models, its theoretical argumentation fails to hold in Colombia, particularly when the effects of violence on economic development are analyzed at the regional level. The principal argument of this paper is that the contention that violence deters economic growth is an overgeneralization and is an incomplete if not inadequate claim in the case of Colombia. As this study will show in more detail in chapters 3, 4, and 5, some

departments in Colombia with homicide rates higher than the national average were able to sustain levels of growth higher than the national average. More importantly, throughout the periods analyzed, two patterns of development are revealed that might explain why this was possible. Thus, the relationship between violence and economics in Colombia may be best understood by analyzing it at the regional level.

We can see that under the institutionalism framework, the unit of analysis is the formal institution, and the argument is that violence undermines those formal institutions, therefore weakening the overall economic performance of a country. This study will challenge that contention and show that the behavior of the formal institutions is an unreliable tool for predicting the economic performance of the region. Moreover, it will argue that it is in the understanding of the institutional arrangements that we can find the explanation of why violence does not hinder the economic growth of a region. Indeed, this study will argue that if formal institutions obstruct or delay the ability to accumulate the economic gains, then the beneficiaries of this wealth will undermine those formal institutions or create additional institutional arrangements. The creation of these informal arrangements would guarantee and protect the access to that wealth.

Thus, this study is arguing that violence not only does not hinder economic growth, but also that the beneficiaries of the economic growth are fostering violence to keep competitors at bay.

John Commons, one of the thinkers of the Institutional School, has concentrated his research on the study of the evolution and impact that law, property rights, and organizations have had on economic and legal power, economic transactions, and income distribution. He concludes that the creation of institutions is the result of formal and

informal processes of the resolution of conflicts, and the success or failure of these institutions will depend on the value assigned to stop the conflict (Martinez, 2001). The formation of the neo-institutional school, whose most distinguished proponent is Douglas North, have also included studies regarding property and common law, and the analysis of the public election process (Demsetz and Alchian, 1972); the search of public rents and distributive coalitions (Olson); studies about organizations, and transaction costs (Coase, Williamson); and, the agency theory (Jensen and Meckling).

For North, institutions through incentives are responsible for determining the economic performance of a society. And when chronological dimensions of the analysis are introduced, then institutional changes are understood. The accumulated experience of societies and their collective learning determines their historic evolution; however, there is no guarantee that these societies can resolve their problems. The arrangements that last in an economy are not always the most efficient. The influence of certain initial "accidents" determine the suboptimal and eccentric path that the economy of a country can evolve into, its "path dependence" (Hodgson, 1999).

Accordingly, a great part of the development path of a society is conditioned by its past. Likewise, Becker (1976) introduces the topic of studying crime as an "economically important activity or "industry"." The criminal is a rational agent that makes the decision to commit a crime as a result of a cost-benefit analysis which also incorporates information about the probability of being punished. The criminal market is determined by the supply of criminals and a demand for protection against crime. This approximation leads to the examination of the judicial system with its laws and prison terms, the examination of judicial institutions. This approach assumes that an increase in

public expenditure related to security would make it "easier to discover offenses and convict offenders" (Becker, 1976).

In the specific case of Colombia, Montenegro and Posada (1995), found econometric evidence to support the hypothesis that a direct link exists between criminality and economic growth. They found that the higher the income per capita, the higher the homicide rate, thus invalidating the argument of those who advance the notions that violence may be the result of high levels of poverty. Additionally, they conclude that this relationship between wealth and crime, combined with a weak judicial system, leads to an increase in criminality. Moreover, after a certain level, this criminality starts slowing development and, if there is a lack of investment and savings, this will have a negative effect on economic growth. But, this study will show that during the period analyzed from 1938 until 1997, it was only the case of the department of Antioquia during 1980-1997 that seems to confirm their last conclusion. Indeed, that department featured levels of violence that were double than the national average and an economic growth slightly lower than the national average.

Rubio (1995) believes that in a society where crime reigns, the accumulation of wealth will be different. He argues that only when levels of violence are low is it possible to have a reasonable economic growth. If high economic growth is wanted, criminality should not only be stopped but homicide rates should be kept at around 20 per 100,000. This study will refute the quality of that argument by showing that, even if his conclusions might be warranted for the national level, at the regional level this is certainly not the case.

For the neo-institutional school, violence can be seen as part of an institutional change. North says that violent or discontinuous changes can appear when the institutional context makes it impossible for the players to arrange new accords and compromises that can lead to new institutional arrangements. In this case, violence could be the only or preferred way out. But, if violence is an "accorded" arrangement among institutions, why does this necessarily deter economic growth? This study will argue that if those institutions had the incentives to opt for violence it is because they knew that the benefits were going to be greater. Moreover, while violence undermines "formal" institutions, these same institutions have the capacity to substitute their inoperativeness by configuring an "informal" institution or arrangements. This temporary informal institution facilitates the path for economic growth.

2.2 <u>Studies from Political Science Perspectives</u>

Studies of the effects of violence on economic development from political scientists center on the behavior of political actors and political institutions, and how their malfunction has negative impacts on the development path. Explanations such as the presence of the state, or its lack thereof, argue that the lack of infrastructure, government offices, social services, and, in general, the lack of goods and services provided by the government are the main reasons for violence (Oquist, 1978; Tovar, 1991; Pécaut, 1991; Restrepo, 1992). Additionally, it is argued that the unequal governmental investment among the departments has created regional disparities that in turn have contributed to the development of certain regions and the backwardness of others. The problem with this approach is that it does not appear to hold when empirical evidence is analyzed. If

the presence of the state were to explain violence and regional development, regions where there is little governmental investment would be the ones to have higher instances of violence and be the least developed.

Yet, this study will show in chapters 3, 4, and, 5 that regions with well-developed infrastructures and strong economies as well as those with very little, had high levels of violence and high economic growth. Unlike economists that disregard the political science interpretation in the understanding of violence in Colombia, this study will take a closer look at the regional level to see whether their socio-political characteristics may help in explaining why certain regions were able to sustain high levels of economic growth while having high levels of violence.

Rementería (1991) conducted outstanding research in the region that is known as "*Magdalena Medio*," or the mid-sector of the Madgalena River, more or less located in the Northeast region of the country. It is a region of about 60,000 square kilometers and has approximately 800,000 inhabitants and traverses eight different departments. One can venture to affirm that the situation in the Magdalena Medio is a microcosm of the violent reality of the country. Rementería details the colonization process of the region, the hardships that new small landowners had due not only to lack of roads and the marketing and commercialization of their products, but also because of the decreasing returns of the land. This situation forced the small landowners to sell their land to large cattle ranchers creating a new isolated, landless, unemployed rural population.

Rementería then takes a further step and describes the different actors present in the region in chronological order. The first to appear were the guerrillas who, like in other colonization movements in different parts of the country, were formed to protect the

new colonizers from the pressures stemming from large landowners. From "protectors" they evolved to later become the "institution" that sets the rules and applies "taxes" in the region because there is not a State to do so. As the guerrilla movement becomes outlawed, the military moves in. As the only State presence in the region, the military is not only is ill-prepared to combat the guerrillas, but is also biased in favor of the use of repression against the peasants to protect the interests of the large cattle ranchers. The third actor to appear is the drug-related mafia.

Rementería argues that the mafia chose that region for two reasons: one was that the lack of infrastructure and presence of the State allowed not only the cultivation of illicit crops, but also air transportation to fly their profitable cargo. The other reason was that the large number of *colonos* was faced with the difficulty of commercializing their agricultural products and was unable to resist the opportunity to make a living growing illicit crops. These sets of actors were able to somehow keep a system of checks and balances in which the mafia paid their taxes to the guerrillas, and the military received payments from the mafia for interfering. But the balance is destabilized once the mafia starts "legitimizing" their presence as honest cattle ranchers. As "legitimate" business people, they refused to pay their illegal taxes to the guerrillas and launched an offensive to kill guerrilla members and whoever was perceived as helping the guerrillas. This offensive was helped by the collaboration of cattle ranchers and the alliance with the military. The state of terror that was thus created made peasants the innocent victims, forcing them to abandon their lands or face death.

Rementería's study shows that institutions in the *Magdalena Medio* were fostering violence because they were benefiting economically. As this study will show in

chapters 3, 4, and, 5, high levels of violence did not have a negative effect on regions that were experiencing an economic boom. Moreover, it seems that those regions experiencing an economic boom had higher levels of violence because the beneficiaries of the wealth were fostering violence.

2.2 Studies from Sociological Perspectives

Sociological studies have contributed in the debate on violence in Colombia by analyzing other sets of institutions that play a role in the economic development of a region. Institutional formations such as land ownership (LeGrand, 1992; Molano, 1992), class (Bergquist, 1992; Ortiz, 1992), and political participation (Posada, 1991; Restrepo, 1992), have been advanced as plausible explanations for the presence of violence and its potential implication on development.

The traditional belief among *violentólogos* or students of violence in Colombia is that violence in Colombia is caused by social injustices or "objective causes." Montenegro, et.al. (2001) offer empirical evidence to disprove this traditional hypothesis that violence is the result of poverty and social inequity. Instead, they forward the notion that drug trafficking and economic booms are the "objective causes" of violence in Colombia. Their main hypothesis rests on the notion that the expansion of drug related activities plus the booms generated by oil, bananas, emeralds, coal, and, gold have increased crime incentives and led to the collapse of the judicial system. This, in turn, has strengthened criminal behavior and generated more violence. Unfortunately, their study concentrates on the collapse of the judicial system as an explanation of violence. In turn, this study will focus on the relationship of economic booms and violence, and will

show that the reason why some departments in Colombia have been able to sustain both homicide rates above the national average and high economic growth is due to the economic booms they experienced during the periods analyzed.

The analysis of the structural macroeconomic and societal imbalances confirms the economists' contributions to the study of violence. It is argued not only that variables such as unemployment, inequality on income distribution, and inflation generate economic hardship and contribute to public dissatisfaction, but also the political incapacity of governments to satisfy the demands of the population. Additionally, the study of the environment that surrounds an individual, and the socio-psychological frustrations that it generates has been also utilized in a holistic manner as an added explanation for the causes of violence and its possible impact on development (Martinez, 2001)

Conflicts can be also classified and quantified according to their socio-political characteristics. The intensity, the number of conflicts, their duration and localization are analyzed by students of violence and then related to the economic growth and the macroeconomic magnitude. Thus, it is argued that a conflict will affect the economy depending on what people involve or affected by the conflict think about the duration of it. If they believe that the conflict is permanent, their decisions will be affected and there will be an impact on the type and rate of economic growth as well as the accumulation of capital. If the social accumulation is weak, then the order of the relationships between power and the economy in a society are negatively affected. When the conflict undermines the strength of the institutions, the growth of the economy is then weakened. Conflict destroys or impedes the formation of physical capital when a society is incapable

of absorbing new technologies, and the uncertainty of the agents leads them to the wrong allocation of resources. The path for optimal accumulation of physical capital is altered through its erosion, destruction, or reassignment for other uses. Indeed, in a conflict, physical capital used for war purposes reduces the amount of capital available for investment in other areas (Martinez, 2001). But if all the consequences of violence are true, what then could explain the case of the department of Valle del Cauca that not only showed levels of violence and economic growth above the national average during the three periods analyzed, but is also one of the strongest local economies of the country?

The different frameworks previously presented are relevant to this study as they provide a theoretical background for additional understanding of the role of violence on economic development. Indeed, this literature allows us to determine the relationship between violence and economic growth, and the role of the institutions as facilitators of the path for economic growth. However, as it has been argued, this study challenges some of their most basic assumptions and invites us to revisit them for a better understanding of the effects of violence on regional economic development in Colombia.

CHAPTER 3- 1938-1959: COFFEE BOOM AND BUST, AND INDUSTRIAL MODERNAZATION

During 1938-1959, seven departments: Boyacá, Caldas, Cundinamarca, Norte de Santander, Santander, Tolima, and, Valle del Cauca had economic growth that was higher than the national average. Of those seven, two departments, Norte de Santander and Valle del Cauca, also endured levels of violence that were higher than the national average. Moreover, three departments: Caldas, Tolima , and Santander, important producers of coffee, had levels of violence higher than the national average but low economic performance, while another three important producers, Cauca, Cundinamarca, and Huila with levels of violence at the national average or slightly lower had high economic growth.

This chapter argues that the reason why the coffee producing departments did not have high levels of economic growth had to do with the volatility of the price of coffee. Indeed, while Tolima, Caldas, and Santander, the departments with low economic growth, had their economic revenues coming mostly from the production of coffee, Cauca, Cundinamarca, and Huila, the departments with high economic growth, had either only recently become coffee producers (Cauca and Huila) or had started diversifying their economies and beginning to be one of the most important industrial clusters in the country (Cundinamarca). Moreover, Norte de Santander, and Valle del Cauca, the two departments that featured high levels of violence and high economic growth were experiencing an economic boom during this period. Indeed, Norte de Santander had a very dynamic commerce sector, and the the department of el Valle del Cauca was not only experiencing an economic boom in the agricultural sector generating revenues from

the production of sugar, but also during this period this department experienced an enormous growth in its industrial sector.

The period from 1938 until 1959 is marred by political animosity as well as land struggles. The dynamics of such institutions are examined to understand whether their role allowed few beneficiaries to extract as much profit as possible while creating chaos in the region.

3.1 National Economic Development Characteristics

The Colombian economy experienced a profound transformation from 1938-1959. Indeed, the legacy of the Great Depression and the Second World War had an impact on the political and economic institutions of the country. As a result of these two crises, the government intervened in promoting the exports of coffee, and stimulated industrialization. Additionally, it expanded the railroad system, constructed new roads to integrate the internal markets, improved tax collection, and reformed the banking systems (Ocampo, 1997).

As shown in table 1, the participation of the primary sector, agriculture and mining, in the overall economy declined while the secondary and tertiary sectors increased their participation from 16.2% and 29.1% in 1938 to 21.1% and 42.2% in 1959 respectively. The average annual GDP growth was a dynamic 4.4%, and during these 21 years the GDP per capita grew 46%⁶. The economic development for this period should be analyzed by taking into consideration the important transformation experienced by specific sectors. For example, the manufacturing sector increased its participation from

⁶ My own calculations using GDP data from "*Estadísticas Históricas de Colombia*", National Planning Department, page 3, TM Editores, Bogotá; and Census population.

13% in 1938 to 18% at the end of the period (see Appendix A). Likewise, commerce, transportation, banking and other financial services experienced a dynamic increase. More specifically, the development of the industrial sector took place in the production of non-durable goods like beverages and food with the exception of the production of cement. These industries were founded by Colombians or immigrants and were overwhelmingly family owned. It was not until the late 1940's that the more dynamic companies received an external influx of capital and began trading publicly (Ocampo, 1997).

Table 1Evolution of Colombia's Economic Structure1938-1959

Year	GDP Growth	Primary Sector	Secondary Sector	Tertiary Sector	Year	GDP Growth	-	Secondary Sector	Tertiary Sector
	%	%	%	%		%	%	%	%
1938	6.5	54.6	16.2	29.1	1949	8.7	47.1	22.3	30.6
193 9	6.1	52.6	18.8	28.6	1950	1.1	40.7	22.3	36.9
1940	2.2	53.1	17.8	29.1	1951	3.1	38.8	19	42.1
1941	1.7	52.7	20	27.3	1952	6.3	38.9	18.9	42.2
1942	0.2	52.3	21.4	26.3	1953	6.1	37.9	19.1	43
1943	0.4	51.3	22.4	26.3	1954	6.9	38.9	18.7	42.2
1944	6.8	51.5	22.5	26.4	1955	3.9	36.6	20.6	45.3
1945	4.7	50.7	22.6	26.7	1956	4.1	37.8	20.6	41.5
1946	9.6	49.1	22.9	27.4	1957	2.2	39.4	20.7	39.8
1947	3.9	49.1	22.4	28.4	1958	2.5	38.6	20.6	40.8
1948	2.8	47.7	23.6	28.7	1959	7.2	36.7	21.1	42.2

Sources: Cuentas Nacionales, Banco de la República and DANE. Revista del Banco de la República. Análisis y Proyecciones del Desarrollo Económico: El Desarrollo Económico de Colombia. CEPAL. 1957. Ocampo and Montenegro. Crisis Mundial, Protección e Industrialización. 1984. CEREC. Estadísticas financieras FMI, Medios de Pagos y Base Monetaria en Colombia. Fondo cultural cafetero.

Furthermore, unlike many other Latin American countries, the development of the industrial sector in Colombia was characterized by regional diversification and specialization. Indeed, since the beginning of the twentieth century, the cities of Bogotá, Medellín, Barranquilla, and, later on, Cali, became important clusters of industrial growth

(Ocampo, 1997). In the agricultural sector, special attention was given to the modernization of the sector, especially in the coffee producing regions and a reevaluation of the land tenure system. A considerable portion of the national agricultural policies were geared towards the improvement of commercial agriculture through the implementation and management of lending, technical, and developmental mechanisms. As a result of these policies, crops like coffee and sugar cane became highly productive enterprises. Additionally, the government protected the agricultural sector resulting in the diversification and growth of products like wheat, rice, cacao, and cattle (Ocampo, 1997).

3.2 Violence During This Period

At the political level, the Conservative Party had been in power since the turn of the nineteenth century, after a victory in the civil war known as "*La Guerra de los Mil Días*," or the Thousand Day War. Political hegemony was broken when, due to internal divisions in the Conservative Party, the Liberals were able to seize power in 1930. Some argue that the origins of violence can be traced to that date due to the unwillingness of the Conservative Party to relinquish power; however, others argue that the period under the Liberal regime (1930-1946) should also be considered as peaceful. Since this study has reliable homicide data⁷ starting from 1938, it will not delve into discussing previous history.

In 1946, the Conservative Party regained power and violence in the twentieth century started (Gaitán, 1995). Gaitán believes that attempts by Conservatives to diminish the credibility and influence of the Liberal Party using the government and the

⁷ I defined reliable as the fact that the data come from the same sources for the period analyzed; however, it is generally agreed upon researches of violence in Colombia, that these numbers are low and under represent the reality.

police force to maintain hegemonic rule led to violence. He is not alone in this line of thinking as many researchers believe and present persuasive arguments that political antagonism was the main factor that unleashed the violence in Colombia⁸. In addition to political antagonisms, notions such as land struggle, class struggle, and weak government are advanced as possible igniters of violence (Ortiz, 1992; Legrand, 1992; Bergquist, 1992; Molano, 1992; Oquist, 1978; Tovar, 1991; Pécaut, 1991).

Once violence increased, the conditions for the flourishing of *bandolerismo*, or small armed groups, crime, and assassinations were utilized. Additionally, the loss of state authority was due to high levels of police corruption and the breakdown of the judicial system throughout the country. These dysfunctional systems, in turn, facilitated crime, including the crimes committed by civil servants (Gaitán, 1995).

But it is possible to really claim causality in the previous statement? Is it this violence that suddenly appeared the main culprit for the chain of events that followed? Or could it be that those factors, *bandolerismo*, corruption, crime, a weak state were already in place, and that some other factor ignited the violence? Moreover, could those factors be both cause and effect of violence?

⁸ The massive number of publications on political partisanship are of great value for the purpose of learning about the two main political parties in Colombia, the Liberal and Conservative parties; however, its analysis as to whether differences in political philosophy were the cause of violence is marred by political sectarianisms and lack of academic scrutiny. This literature tends to be presented as stories recounted in the voices of the victims who suffered enormously at the hands of their victimizer, customarily somebody belonging to the other party. Another frequent feature found in this narrative is the oversimplification of the explanation of the causes of violence. Indeed, violence is often presented as the result of hereditary grudges of past conflicts among families or, in some cases whole towns, which are perpetuated throughout generations. Although this literature is flawed, and has been used to forward the concept of political animosity as the source of violence in Colombia, it is nonetheless, valuable to highlight the works of some of its best proponents.

As shown in figure 1, the period analyzed began with comparatively low rates of homicide. Indeed, from 1938 until 1947 the homicide rate hovered around 30 per 100,000 inhabitants, but by the end of the 1950's, this rate had almost doubled.

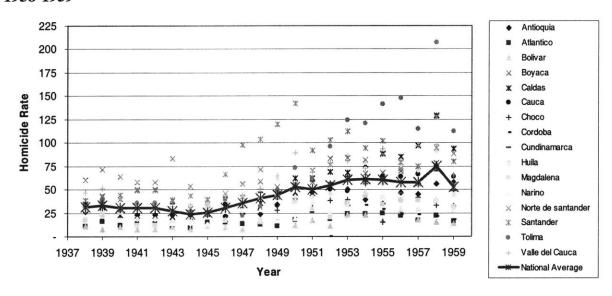
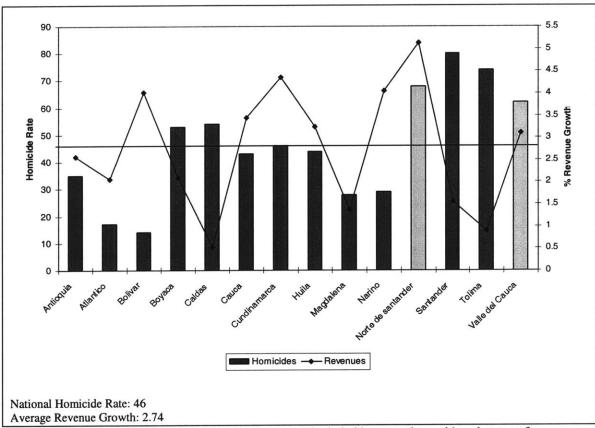


Figure 1 Evolution of Homicide Rates by Departments 1938-1959

Source: Anuario General de Estadística 1938-1959. República de Colombia, Contraloría General de la República, Dirección de Estadística. Imprenta Nacional. Colombia.

What happened during this period that contributed to the rise of violence? Why were high levels of violence concentrated in certain regions? To be able to better answer these questions, it is important to analyze the economic growth and the economic composition of each of these regions. In figure 2, it is possible to see that high levels of violence were concentrated in six departments: Boyacá, Caldas, Norte de Santander, Santander, Tolima, and Valle del Cauca.

Figure 2 Average Homicide Rate and Revenue Growth 1938-1959



Note: The departments of Chocó and Córdoba were not included because they achieved status of departments in 1948, and 1952 respectively.

Source: Anuario General de Estadística 1938-1959. República de Colombia, Contraloría General de la República, Dirección de Estadística. Imprenta Nacional. Colombia. DANE

During this time, all the departments showed positive growth although the degree in which this occurred varied. While Valle del Cauca and Norte de Santander had an average growth above the national average at 3.10% and 5.13% respectively, Caldas with 0.52%, and Tolima with 0.89% had the lowest rates of growth. Moreover, while Caldas, Cundinamarca, and Huila had average homicide rates slightly below the national level, all three of these departments had growth well beyond the national average. If violence deters economic growth why were some departments with high levels of violence able to grow economically? Could their economic structures explain this paradoxical

development?

<u>3.3 High Growth and High levels of Violence: The Cases of the Norte de Santander</u> and Valle del <u>Cauca</u>

	y, Comparison Between Norte de Norte de Santander			Valle del Cauca				
	1938	1950 ¹	1959 ²	1938	1950 ¹	1959 ²		
Population	346,181	387,450	534,486	613,230	1,106,927	1,7330,053		
Urban	25.4%	37.5%	49.2%	43.8%	49.7%	70.4%		
Rural	74.6%	62.4%	50.8%	56.2%	50.3%	29.6%		
Homicide Rate	60	56	88	47	89	65		
Economically Active Population	52%	34%	28.4%	49.2%	19.3%	30.6%		
Agricultural	78.5%	56%	51.8%	71.2%	44.6%	32.4%		
Mining	1.4%	1.5%	0.5%	0.9%	1%	1.3%		
Manufacturing	8.6%	9%	9.6%	12.9%	16.9%	18.9%		
Services	7.4%	16.4%	17.6%	11.1%	15.5%	19.8%		

¹The data on population for this year is based on the 1951 census. ² The data on population for this year is from the 1964 census.

3.3.1 Norte de Santander

The socio-economic configuration of this department was quite peculiar. This department ranked as one of the highest in volume of rural population, as well as one with the least developed infrastructure. The lack of infrastructure prevented the development of the industrial sector; however, by the 1950's, the department was promoting the creation of a large cement plant, and the opportunity to exploit coal, gypsum, clay, and limestone, key ingredients in the production of cement (Tellez Villamizar, 1959). Additionally, although the majority of its population worked in the agricultural sector, its production was mostly to satisfy the needs of the internal market with the exception of coffee production.

However, given that this department is located next to Venezuela, the activities related to commerce and tourism were quite dynamic. Indeed, the high volume of goods exchanged across this border made this port the third largest in South America. Many products imported to the manufacturing sector for the rest of the country, and many exports came and left through this point bringing in an important amount of foreign currency (Gómez, 1959).

3.3.2 Valle del Cauca

This department throughout its history presents the peculiar characteristic of high levels of violence but also high levels of economic growth. Additionally, it has one of the most important clusters of industry in the country. In the early 1940's and 50's, violence was concentrated in regions in or nearby the mountains although presence of violence in the valley along the Cauca River was especially acute at the turn of the century⁹. As can be seen in table 3, land ownership changed dramatically in a short period of time. Indeed, in 1959, 18% of landowners already were controlling 70.3% of the agricultural land. The means of appropriation of this land varied, but it was mostly acquired through different methods of terror, the use of political bosses who used the police to scare peasants, and through legal maneuvering. These lands were mostly utilized for coffee production in the mountain region, for sugar cane and cotton along the fertile valley area, and for cattle ranching in the low sections of the mountains.

⁹ Betancourt and García (1990) argue that big haciendas had a labor crisis starting at the mid nineteenth century due to the abolition of slavery, the recruitment of slaves and laborers to serve as soldiers in the several civil wars, and the development of small-medium size farming around their properties. The combination of these factors led to violent clashes that lasted until the beginning of the twentieth century.

	1954	1959
Number of Farms with less than 10 hectares	59,000	35,500
% of total of landowners	68	69.9
% of land owned	10	9.4
Number of Farms with more than100 hectares	2,360	2,576
% of total of landowners	4	5
% of land owned	60	58
Number of Farms with more than1,000 hectares	N/D	78
% of total of landowners	N/D	13
% of land owned	11	12.3

Table 3 Evolution of Land Ownership in Valle del Cauca Department

Source: "Matones y cuadrilleros: Origen y evolución de la violencia en el occidente colombiano 1946-1965." Page 197. Tercer Mundo Editores, Bogotá, 1990.

Based on the behavior of the agricultural sector, this study argues that the consequences of this violence in the agricultural production seemed insignificant. The production of sugar cane increased from 51,200 metric tons in 1940 to 553,300 in 1955¹⁰. The other main crop, coffee, also experienced an increase in its production. Using the flow of money invested different areas in the agricultural sector as a proxy,¹¹ the amount of money lent in constant pesos of 1950 for coffee crops, grew from \$1,992,572 in 1938 to \$5,141,611 in 1959. The same can be seen in cattle where \$1,352,147 was lent in 1938 versus \$7,079,399 in 1959.

In terms of industrial development, during the 1950's five new sugar mills were created in this department while others expanded and consolidated their markets¹². This expansion was closely associated with the decreased production of sugar beet due to WWII. Indeed, by 1954 this department was producing 91% of the total sugar in the

¹⁰ From Betancourt and Garcia's Book "Matones y cuadrilleros: Origen y evolución de la violencia en el occidente colombiano 1946-1965. Tercer Mundo Editore, Bogotá, 1990.

¹¹ I could not find information in terms of production for the individual crops in the department. Therefore, I have used data from the Agricultural, Industrial, and Mining Credit Cooperative as a proxy to show the increment of production of different crops. I have used data from the new loans for investments attempting to show that the continuous investment in the crops analyzed can be used as a parallel to demonstrate their expansion and growth.

¹² "Economía y Violencia", page 185, 1990.

country (Cantor and Rodriguez, 1990). This period was the beginning of a booming sugar industry that will be explored in the next period. Furthermore, the growth in the sugar industry was directly related to the industrialization process transforming the country. In this department alone, 656^{13} new industries were created between 1945 and 1959. As shown in table 2, the proportion of the population employed in the manufacturing sector grew from 12.9% in 1938 to 18.9% in 1959. Job opportunities in the urban sectors, and perhaps violence in the rural sector were catalysts for the migration to urban areas. Indeed, by 1938, 56.2% of the population was living in rural areas but by the end of the 1950's this proportion had decreased to 29.6%. The agglomeration of people around cities pressured them to create a new social order rife with tensions that will be further explored in chapter 4.

3.4 Patterns of Development

In sum, violence did not deter economic growth in two departments that although coffee producers, their economic growth was due to an economic boom in at least one sector. The department of el Valle del Cauca was not only experiencing an economic boom in the agricultural sector generating revenues from the production of sugar, but also during this period this department experienced an enormous growth in its industrial sector. The other department, Norte de Santander, experienced an economic boom in the commerce sector due to its proximity to Venezuela made it an important region for trade. Additionally, this study has argued that the reason why the rest of the coffee producing regions did not show a dynamic growth had to due more to externalities rather than

¹³ My own calculations based on information appeared in a table complied by Cantor and Rodriguez in their book "Economía y Violencia, 1st ed., Fondo de oublicaciones, Universidad Distrital Francisco José Caldas, Bogotá, 1990.

violence itself. Furthermore, struggle over the acquisition of fertile land, labor conflict between large coffee producer and peasants, as well as political animosity peppered the regional character of the coffee producing regions during this first period. That the departments in the coffee producing region featured high levels of violence is an evidence that the actors who were benefiting from its production were using all means to guarantee and protect their wealth.

Moreover, two patterns of development began to form during the period from 1938-1959 that will become more evident in later years. On the one hand, the department of Valle del Cauca started to strengthen its industrial sector and diversifying and modernizing its agricultural sector. The majority of the population of this department was urban and 38.7% of its population was working in the manufacturing and services sectors. On the other hand, the department of Norte de Santander had a rather small economy, the majority of its population was still rural, and the manufacturing sector was weak. However, during the period analyzed this department experienced an economic boom in the commerce sector that brought foreign currency into the local economy.

Thus, there seems to be that during this period the formation of two patterns of development in Colombia began to occur. On the one hand, departments with strong economies, large manufacture sectors, modern agriculture, and large concentration of the population. On the other hand, departments with relative small economies, not densely populated but whose economic growth was due to an economic boom. In the following chapters this study will show that indeed there are two patterns of development, and it is the analysis of the socio-economic peculiarities of each of the regions that helps us understand the effects of violence on regional economic development in Colombia.

CHAPTER 4- 1960-1975: CONSOLIDATION OF STATE INTERVENTION AND THE EXPANSION OF THE AGRICULTURAL FRONTIER

During 1960-1975, ten departments in Colombia experienced economic growth higher than the national average, and of those ten, six departments, Antioquia, Cundinamarca, La Guajira, Meta, Valle del Cauca, and, Cesar, also had levels of violence that were higher than the national average. This chapter further analyzes the economic characteristics of each of those six departments and presents a brief description of the economic and socio-political characteristics of each.

In order to help explain why these departments were able to grow while sustaining high levels of violence, two clear patterns of development have become more evident. On one hand, three departments Antioquia, Cundinamarca, and Valle del Cauca, have large urban populations, well-established and vibrant manufacturing sectors, and, overall, strong economies. These three departments benefited from the policies of industrial promotion and protection. On the other hand, there are three departments whose economies are rather small, but during the period analyzed experienced an economic boom. While the Department of La Guajira experienced a bonanza in the commerce sector mostly due to the smuggling of marijuana, the departments of Meta and Cesar had an incredible expansion of their primary sectors, particularly cattle farming.

Additionally, this period was characterized by an aggressive movement for the colonization of frontier land and the appearance of guerrilla groups. Two of the departments, Meta and Cesar, experienced the influx of colonizers during this period. This "armed colonization" was the process in which those who had lost their land during the conflicts of the 1930's and 1940's joined independent armed groups that were

colonizing new land (Molano, 1992). As this study will show, two departments, Meta and Cesar, which featured levels of violence and economic growth above the national average, experienced the process of armed colonization. Moreover, in terms of political developments, this period featured the *Frente Nacional* or National Front, an undemocratic configuration that consisted of the agreement between the two main party elites to alternate the presidency and the sharing of power and government at all levels. The dynamics of these institutions are further analyzed to see how their behaviors might have played an important role in the economic outcome of each of the regions that featured high levels of violence and high economic growth.

4.1 National Economic Development Characteristics

Between 1960 and 1975, the Colombian GDP more than doubled at an average annual rate of 5.24%. The population continued with the pattern of growth that had started in the late 1950's and, combined with an improvement in the life expectancy and high fecundity rates, it grew 56% at an annual average rate of $3.1\%^{14}$.

The economic growth went along with a noticeable structural change. Indeed, as shown in table 4, the participation of the agricultural sector in the overall GDP continued to decrease. While in 1960-64 this sector represented 28.9% of the economic activity of the country, at the end of the 1970's its participation had been reduced to 23.4%. The reduction of the relative size of the agricultural sector paved the way for the strengthening of new economic activities not only in the manufacturing sector but also in the transportation, financial, communication, and public utilities sectors. It is important

¹⁴ Own calculations using data from "Cuentas Regionales de Colombia 1960-1975". National Planning Department. Page 29. Bogotá, 1977.

to note that although the manufacturing sector continued its growth, its pace was slower

than during the previous decades. However, the industries in the tertiary sector grew

from 32.5 % of the overall economic activity in 1960, to 36.7% at the end of 1975 (see

Appendix B for more details).

Table 4Composition of the National Economic Activity1960-1979

	1960-64	1965-69	1970-74	1975-1979
Agricultural Sector	28.9%	26.6%	23.9%	23.4%
Mining	3.1	3	2.3	1.4
Manufacturing	20.6	21.1	22.5	22.9
Construction	2.9	3.2	3.6	3.3
Commerce	9.8	9.9	10.4	10.4
Financial Services	5	5.6	6.5	6.8
Transportation	6.9	6.9	7.3	7.9
Communications	0.5	0.7	0.8	1
Public Utilities	0.6	0.7	0.8	0.9
Government Service	7.1	7	7.2	7.3
Personal Services	7.3	7.2	7.3	7.8
Rental housing	7.3	8	7.5	7

Source: Historia económica de Colombia; José Antonio Ocampo, Compilador; Biblioteca Familiar de la República, Imprenta Nacional de Colombia; Bogotá, 1997.

According to Ocampo (1997), the development process during this period allowed the most important accumulation of private and social capital in the history of the country. In terms of private capital, the construction of large modern enterprises, the industrialization of the agricultural sector, the addition of a new fleet of vehicles, and the construction of new housing and offices in the cities were the most notorious achievements. Likewise, the social capital was improved by increasing the levels of education and skills of the labor force, and through an overall investment in basic infrastructure. The changes in the composition of the economic activity were also visible in the employment structure. Indeed, while the agricultural sector was descending in its relative importance, the proportion of the population employed in primary activities (agriculture and mining) decreased from 48.9% in 1964 to 35.2% in 1978.¹⁵ Moreover, the secondary sector (industry and construction) increased its participation from 17.1% to 22.4%,¹⁶ and at the end of the 1970's a significant percentage of the population (42.5%) was employed in the tertiary or service sector (Ocampo, 1997).

Fearing that the example of the Cuban revolution was going to be replicated in Colombia, the government of the National Front under the auspices of "Allegiance for Progress" proposed a series of reformist legislation: agrarian reform, strengthening of the labor movement, labor legislation, and an expansion of social services. The program of import substitution became more aggressive and in 1969 the *Pacto Andino*, a free-trade zone among Andean countries, was born. This accord was created with the idea that in order to develop new industries, the size of the markets needed to be expanded. The new strategy contained two basic elements: 1) the concerted effort to develop basic industries in a regional context, and, 2) the elimination of trade barriers among the member countries while gradually establishing a uniform protection system. Of the two elements contained in the strategy, only one, the export of new products, had important consequences; the other, the free-trade market, never materialized (Ocampo, 1997). This concerted effort of industrialization strengthened the industrial clusters located in the departments of Antioquia, Cundinamarca, and Valle del Cauca.

 ¹⁵ From the Population Census of 1964 and The National Household Survey of 1978.
 ¹⁶ Ibid.

[·] Ibid.

4.2 Violence During This Period

In 1953, General Augusto Rojas Pinilla had a coup d'état that lasted until 1957 when he was deposed and replaced by a short lived military junta. These political events led to a bizarre and undemocratic configuration known as the *frente nacional*, or National Front (1958-1974). The National Front consisted of the agreement between the two main party elites to alternate the presidency and the sharing of power and government at all levels. Students of political science "officially" put an end to "La Violencia" once the National Front Was formed, citing that political agreement halted the killings between party affiliates.

However, as shown in figure 3, the homicides rates not only increased, but more departments than the previous period had homicide rates higher than the national average. It was not until 1970, the last term of the National Front, when the homicide rates experienced a slight decline. Moreover, Restrepo (1992) argues that after the National Front, any effort to broaden the political spectrum has been futile due to the oligarchy tradition of both parties and their lack of interest in implementing any real reform. The only source of opposition has come from the Communist Party that not only has lacked broad popular support, but also has endured a systematic annihilation of its leaders.

Additionally, this period was characterized by an aggressive movement for the colonization of frontier land and the appearance of guerrilla groups. This "armed colonization" was the process in which those who had lost their land during the conflicts of the 1930's and 1940's joined independent armed groups that were colonizing new land (Molano, 1992).

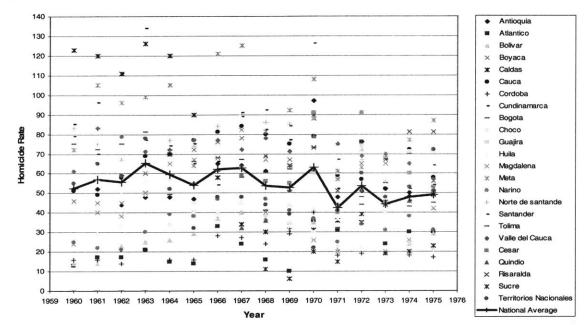


Figure 3 Evolution of Homicide Rates by Department 1960-1975

Some researchers (Ocampo, 1991; Schultz, 1970; Murillo-Castaño 1991) claim that another important consequence of the violence in this period is the process of internal migration. Indeed, urbanization during this period was dramatic but, when compared to other Latin American countries, the Colombian case is not unique; rather, it follows the same pattern as that of other neighboring countries. Although, violence was undoubtedly a factor in the migration to urban centers, this study will argue that the notion that violence "forced" migration to urban centers should be revisited.

Source: Source: Anuario General de Estadística 1960-1967. República de Colombia, Contraloría General de la República, Dirección de Estadística. Imprenta Nacional. Colombia. DANE.

Table 5	
Urban Population, Latin American	Countries Comparisons, 1960-1975

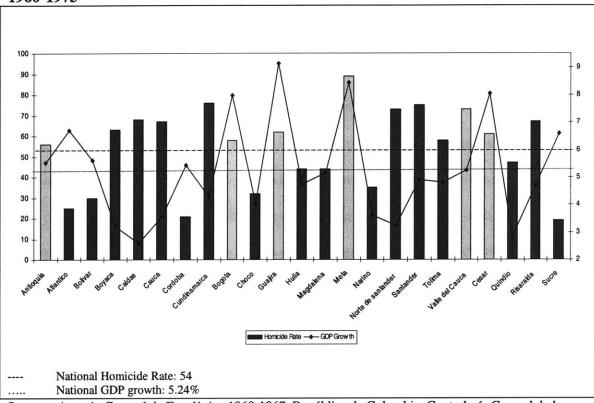
Country	Population	1960	1965	1970	1975
Argentina	% Urban	73.6	76.1	78.4	80.7
Colombia	% Urban	48.2	53.5	57.2	60.7
Mexico	% Urban	50.7	54.9	59	62.8
Perú	% Urban	46.3	51.9	57.4	61.5
Venezuela	% Urban	61.2	66.7	71.6	75.8

Source: International Bank for Reconstruction and Development/ The World Bank, Development Data Group, The 2002 World Bank Development Indicators CD-ROM, Washington, 2002.

Meanwhile, the Cuban revolution, Che Guevara's call for popular struggle, and the "acceptance" of the Frente Nacional by the Colombian Communist Party, ignited fervent passions in the labor and student movements. The experiences of revolutionary struggle in other Latin American countries combined with the creation of new leftist parties, contributed to a new political awakening that was manifested in strikes, and demonstrations by mainly students and white collar workers (Pizarro, 1992). These different manifestations and interpretations of the revolutionary rhetoric led to the founding of different guerrilla groups. Furthermore, "the desire to integrate urban revolutionary feeling with rural violence" contributed to the development of the insurrectionary groups (Pizarro, 1992).

What was happening at the regional level with these economic transformations and the new dynamics in violence? Were all departments in Colombia featuring the same type of development? As shown in Figure 4, ten departments had GDP growth above the national average, and of those, six had homicide rates above the national level too.

Figure 4 Average Homicide Rate and GDP Growth 1960-1975



Sources: Anuario General de Estadística 1960-1967. República de Colombia, Contraloría General de la República, Dirección de Estadística. Imprenta Nacional. Colombia. DANE. Cuentas Regionales de Colombia 1960-1975, DANE.

4.3 High Growth and High Levels of Violence: The Cases of Antioquia, La Guajira, Meta, Valle del Cauca, and Cesar.

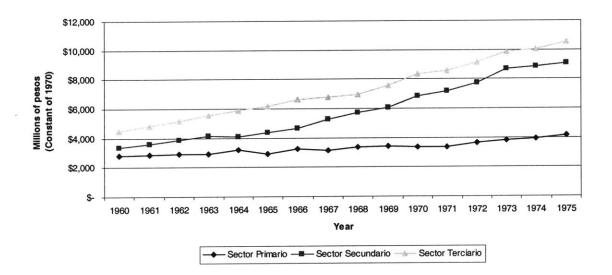
4.3.1 Antioquia

When analyzing the economic structure for this department during the fifteen years from 1960-1975, it is remarkable to see that its GDP more than doubled and had a continued positive growth at an average rate of 5.53%. As shown in figure 5, the secondary and the tertiary sectors particularly increased their overall participation by 31.45% and 42.42% in 1960, to 38.15% and 44.34% in 1975 respectively. Additionally, the population grew 54.4% from 2,143,500 in 1960 to 3,310,300 in 1975. This growth

might provide a partial explanation for the expansion of the construction and the utilities sectors, although the expansion of the manufacturing sector might also explain the need to increase the capacity for utilities services. Indeed, in the secondary sector, both the construction and the utilities sectors grew to almost four times their original sizes, while the manufacturing sector was increasing its capacity at an annual average pace of 7.20%.

In the tertiary sector, it is important to highlight the growth of the communication, financial, housing rental, and government service sectors. The financial industry had an undeniable expansion, soaring from representing 2.78% of the total GDP in 1960, to 10.89% in 1975. This expansion might be an expected consequence of the growth of the industrial sectors. As more industries are formed, and the already established expand their output, the need for accessing capital and financial backing is greater. Likewise, the growth of the communication and the housing rental sectors might be consequences of the population growth.





Source: Cuentas Regionales de Colombia: 1960-1975- DNP.

4.3.2 La Guajira

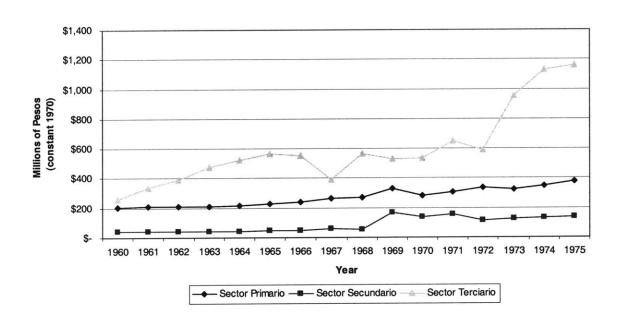
Although it managed to achieve the status of department in only 1964,¹⁷ La Guajira, a forgotten region in the northeast of Colombia with a large population of nomadic *wayuu* natives, had a relatively small economy. Activities in the agricultural and mining sectors represented 40.63% of the GDP in 1960; however, by the end of 1975 these activities had lost their importance due mostly to the expansion of the tertiary sector. As seen in figure 6, this tertiary sector had an erratic performance but the most dynamic growth, representing 51.47% of the GDP in 1960, to 69.26% by the end of 1975. In 1960, commercial activities were generating revenues equivalent to 72.80% of the tertiary sector, or 35.7% of the whole GDP. Yet, since this department had a small population and almost no infrastructure, these commercial activities could not be the result of the legal economy of the department. The commercial activities spun around the smuggling of merchandise coming from Venezuela, and, later, entrepreneurial activities were organized around the shipment of marijuana that was being cultivated in nearby departments.

As Thoumi (1994) documented, increased interdiction and eradication programs in Mexico, the biggest supplier of marijuana to the U.S. at the time, made traffickers look for new sources to supply the needs of the U.S market. The Colombian marijuana industry grew so rapidly that, according to a President's Commission on organized crime (1986), "by 1975, airstrips capable of handling heavy 4-engine planes with the capacity to hold one ton of marijuana were common along the Guajira Peninsula and loading

¹⁷ The law 19 of November 10, 1964, boosted to the category of department the former *intendencia* de La Guajira. *Intedencias* were regions that were part of Colombia but due to their population and geographic location did not enjoy the same privileges as the departments. In other words, the presence of the State was almost non-existent.

facilities for "motherships," large vessels capable of transporting tons of marijuana, dotted the coast." In 1973 alone, the commercial sector grew 79% representing 83.23% of the tertiary sector, a trend that continued to the end of the period analyzed.

During the first year that the commerce sector plummeted, 1967, the homicide rate also experienced a decline; however, it rebounded and towards the end of the period the rate was 181 per 100,000 inhabitants.





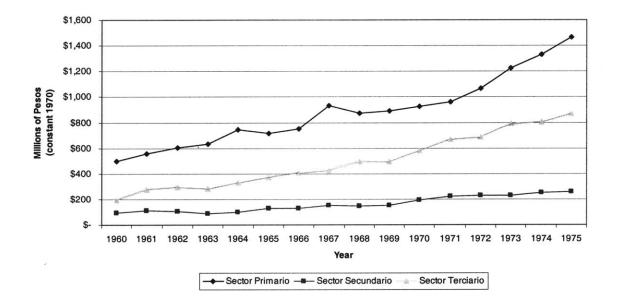
Source: Cuentas Regionales de Colombia: 1960-1975- DNP.

4.3.3 Meta

Two important social episodes had an influence on the development of the scantily populated department of Meta. Firstly, amnesty was given to guerilla members by the government of Rojas Pinilla (1953-1957), and, subsequently, most of their leaders were assassinated. Secondly, there was a mass migration of people from the interior in a

quest for new land resulting in the expansion of the agricultural frontier. As shown in figure 7, the primary sector grew considerably during this period, particularly cattle ranching and rice cultivation. These two products were key in fueling the economy of the department until 1975 (Baquero, 1990). Coincidentally, the years of its peaks, 1964, 1967, and 1972 forward, were years of high levels of violence. In the secondary sector, commercial activities related to the transport and commercialization of cattle and rice to the interior grew from 2.09% in 1960, to 7.38% in 1975. Additionally, the government was incrementing its presence in the region by investing in the public sector, and the proportion of this item in the overall GDP grew 67.8% in the fifteen years analyzed.





Source: Cuentas Regionales de Colombia: 1960-1975- DNP.

4.3.4 Valle del Cauca

For a second time, this department shows high level of economic growth and high levels of violence. During the fifteen years from 1960-1975, it is remarkable to see that the GDP of this department more than doubled and had a continued positive growth at an average rate of 5.26%. Additionally, its population also grew 65.4%, and by the end of 1975, the department had a population of 2,486,900. The secondary sector, formed by industry, construction, and public utilities, not only grew but represented 29.27% of the GDP in 1960. By 1975, these activities represented 33.73% of the overall GDP structure. Of particular importance, was the growth of manufacturing. Indeed, in 1960 this sector generated \$2,405,000¹⁸; however, by the end of 1975, the manufacturing sector was bringing in $(5,120,500)^{19}$ to the department. In the tertiary sector, the banking and insurance industry had a dynamic growth doubling its GDP participation by the end of 1975. This growth could be attributed to the expansion of the manufacturing sector and its need for better financial services. Additionally, both commerce and transport sectors grew dynamically, and this too can be attributable to the expansion of the manufacturing sector.

¹⁸ In constant pesos of 1970.
¹⁹ Ibid.

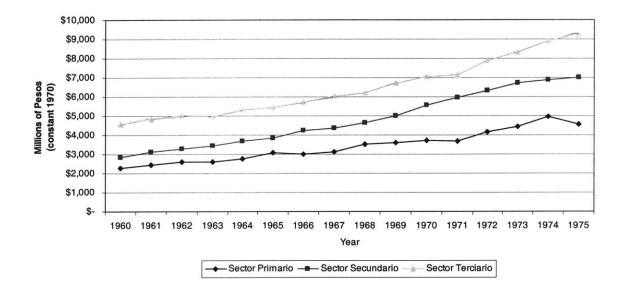


Figure 8 Valle del Cauca: GDP by Sector 1960-1975

Source: Cuentas Regionales de Colombia: 1960-1975- DNP.

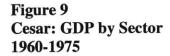
4.3.5 Cesar

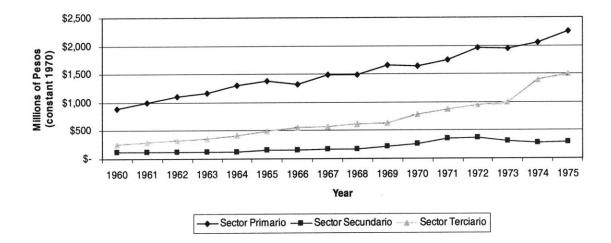
Cesar was a part of the department of Magdalena until 1967²⁰ when it became an autonomous department. During the period from 1960-1975, the primary sector grew at an average annual rate of 6.5%. The agriculture sector had an intense development particularly in the valley of the Cesar River. Extensive tracks of land were used for the cultivation of crops such as cotton, corn, rice, sugar cane, and cacao. The livestock sector during this period doubled, and cattle was used not only for meat but for milk pasteurization when a few large *"rancherías"* invested in milk processing plants. Additionally, the fishing industry grew its participation from 0.58% of the total GDP in

²⁰ Cesar was segregated from the department of Magdalena and became a department according to the Law 25 of June 25, 1967.

1960, to 1.86% at the end of 1975. The mining sector also experienced an expansion mostly due to the discovery of oil wells and coalmines.

In the secondary sector, it is important to highlight the growth of the activities in the commerce sector. These activities, closely related to the commercialization of cattle and agricultural products, grew from representing 9.1% of the total GDP in 1960 to 26.4% in 1975. It is also important to note that the homicide rate doubled reaching 91 homicides per 100,000 inhabitants for 1970, a year that the secondary sector experienced a surge, and for 1972, when the same happened in the primary sector.





Source: Cuentas Regionales de Colombia: 1960-1975- DNP.

4.4 Patterns of Development

As this chapter has shown, six departments, Antioquia, Cundinamarca, La Guajira, Meta, Valle del Cauca, and Cesar featured levels of violence and economic growth higher than the national averages. Moreover, three of those departments, Antioquia, Cundinamarca, and Valle del Cauca, strengthened their industrial sector under the import substitution model of development. And three departments, La Guajira, Meta, and Cesar, experienced the process of land colonization.

During this period two patterns of development become more evident and might help explain why some departments were able to grow while sustaining high levels of violence. Indeed, two different models of development are occurring at the regional level each with its own peculiar characteristics. On the one hand, there are three departments: Antioquia, Cundimarca, and, Valle del Cauca that are home to the three largest cities in Colombia: Medellín, Bogotá, and Cali, respectively. These three departments have wellestablished manufacturing sectors, strong and modern agricultural sectors, and vibrant commerce and services sectors; in other words, they all feature a strong economy. By 1975, these three departments had a combined GDP that represented 51.7% of the national GDP. Additionally, by 1975, 42.8% of the total population was living within these three departments.

On the other hand, there are departments whose economies are rather small, but during the period analyzed experienced an economic boom. Indeed, while the departments of Cesar and Meta had a rapid expansion of the primary sector, particularly cattle farming, the department of La Guajira experienced a surge of the secondary sector, due to the boom that the commercialization of marijuana brought to the region. But unlike their counterparts Antioquia, Cundinamarca, and Valle del Cauca, the combined GDP of these three departments only represented 4.7% of the national GDP. Additionally, by 1975, only 4.4% of the total population was living within these three departments.

In sum, evidence shows that violence did not deter economic growth in six departments of Colombia during the period from 1960-1975, thus rebuking the assertion that violence deters economic growth. The explanation for this development can be found in the regional characteristics peculiar to these departments. Indeed, three departments that had a strong economic infrastructure, and three departments that were experiencing an economic boom were able also to sustain high levels of violence. Thus, it seems that violence does not have a negative impact on economic development when either the department has an overall strong economy and is experiencing a rapid growth at least in one of its economic sectors, or when the department is experiencing an economic boom. Moreover, commercialization and industrialization of the agricultural sector created land struggles in the departments of Valle del Cauca and Cundinamarca. The discovery of fertile lands in the new settled territories of the departments of Meta and Cesar brought along large landowners that wanted to have access to that land. The working urban poor and middle class demanded more social mobility and political participation. All those factors fueled violence in the departments studied above.

CHAPTER 5- 1980-1997: ECONOMIC CRISIS, MARKET LIBERALIZATION, AND COAL, OIL, AND COCAINE BONANZAS

During 1980-1997, nine departments in Colombia experienced economic growth higher than the national average, and of those nine, five departments, La Guajira, Meta, Risaralda, Valle del Cauca, and Nuevos Departamentos²¹, also had levels of violence that were higher than the national average. It is important to note that three of those departments, La Guajira, Meta, and Valle del Cauca, also featured high levels of violence and economic growth during the period from 1960-1975. As this study has argued in previous chapters, the positive relationship between violence and economic growth was possible because of the presence of an economic boom in at least of the economic sectors. Thus, this study argues that conditionally, did not allow violence to deter economic growth in these regions.

Of the departments that showed levels of violence and economic growth above the national average, three departments, La Guajira, Meta, Nuevos Departamentos, experienced a boom in the exploitation of coal (La Guajira) and oil. The cocaine bonanza, although difficult to measure, brought revenues into specific sectors of the economy in the departments of Meta, and Valle del Cauca, and Risaralda. Additionally, the departments of Valle del Cauca and Risaralda experienced a rapid growth in the secondary and the tertiary sector. This study will argue that the main reasons for the growth of these two sectors had to do with the privatization of tasks previously performed by the government, and the decentralization of government resources. Indeed, due to the privatization of tasks previously performed by the government, private capital was

²¹ The departments grouped under this label are: Arauca, Casanare, Putumayo, San Andrés, Amazonas, Guainía, Guaviare, Vaupés, and Vichada.

transferred to the department to be invested in those sectors creating an economic boom. However, the growth of the construction sector is evidence of the presence of drug money being laundered in the local economy. The two patterns of development previously identified in chapters 3 and 4 are also evident in this period. Additionally, the department of Antioquia featured levels of violence that were double than the national average and a GDP growth that lower than the national average. The evidence in this particular case support the conclusion of Montenegro y Posada (1995) in regards that after certain level of violence, this criminality starts slowing development and, if there is a lack of investment and savings, this will have a negative effect on economic growth.

5.1 National Characteristics of Economic Development

In the 1980's Colombia's economy started experiencing a deceleration that was fueled in part by the deterioration of coffee prices, the Mexican crisis of 1982, and, in the following year, the collapse of the Venezuelan economy. Although Colombia did not fare as badly as its neighbors, these crises did slow GDP growth. Indeed, during the 1980's the rate of growth for the GDP averaged 3.4%, significantly lower than the 5.7% of the 1970's.

Towards the end of 1985, the country started recovering with a new dynamism that was particularly evident in the expansion of non-traditional exports (new agricultural and manufactured products), as well as the export of oil, coal, and nickel. Coffee prices were up again, and Colombia had regained financial credibility by its debtors. However, in 1990 the government initiated a process for gradually liberalizing imports which was to be fully implemented during a three-year phase. In 1991, however, the decision to

slow the opening of the market was reversed by the new administration, bringing the growth of the economy towards a halt (Ocampo, 1997).

During the whole period (1980-1997), the economy grew at an average rate of 3.7%. Although not terribly low when compared to the performance of other Latin American countries, it was lower than the rate of growth for the 1960-1975 period. On the other hand, the productive structure had important changes (see table 6). The mining sector significantly increased its participation of the total GDP, while the construction sector which had decreased towards the middle of the 1980's bounced back by the mid-1990's.

Table 6Composition of GDP by Sectors1980-1997

	1980	1985	1991	1997
Primary Sector	24	24.2	26.8	17.8
Agriculture	22.7	21.9	22.3	13.8
Mining	1.3	2.3	4.5	4
Secondary Sector	26.7	26.6	25.5	23.3
Manufacturing Industry	22.4	21.2	21.1	14.1
Construction	3.3	4.4	2.9	6.1
Public Utilities	1	1	1.1	3.1
Tertiary Sector	48.7	48.9	48.1	57.3
Commerce	12.7	12.1	11.3	10.45
Financial Services	14	14.2	15	15.9
Transport	8	7.7	6.8	5.4
Communication	1.3	1.7	1.8	2.3
Government Services	7.8	8.4	8.5	14.8
Personal and Domestic Services	4.9	4.8	4.6	8.5

Source: DANE and data from the "Estadísticas Históricas de Colombia."

The participation of the agricultural sector continued to lose its importance in the overall GDP, while the manufacturing sector decelerated its growth. Furthermore, the impact of the commercial liberalization, reevaluation, and the dynamism of the internal demand created important changes in the overall dynamism of the agricultural and

industrial sectors. Crops like wheat, barley, corn, as well as soy were negatively affected by the arrival of cheaper imports while the production of sugar cane increased. In the manufacturing industry, the textile and leather sector as well as heavy capital industries, principally paper and rubber products, were severely hit by the new rush of foreign products. On the other hand, the liberalization of the market had such a direct effect on the exports that its traditional structure was changed. Indeed, for the first time in the economic history of Colombia, the participation of coffee exports declined from more than half to about a fifth of the total exports; non-traditional exports increased their overall participation from about 30% to almost half of the total participation; and, finally, the export of minerals, particularly oil and coal, gained an important participation (Ocampo, 1997).

Table 7

	1980		19	97
	US\$	%	US\$	%
Total of Exports	3,841		11,549	
Coffee	2,361	61.5	2,261	19.6
Mining	173	4.5		
Oil and its derivates	101	2.6	2,707	23.4
Coal	11	0.3	888	7.7
Nickel ¹			161	1.4
Gold ¹			173	1.8
Emerald	61	1.6	452	4.6
Non-Traditional Exports	1,308	34	5,532	47.9
Manufacturing	6665	17.3	2,026	17.6
Capital Intensive Manufacturing	398	10.4	2,348	20.3
Agricultural	245	6.4	1,122	9.7
Total of Imports	4,283		14,369	
Consumable Goods	570	13.3	2,773	19.3
Goods for transformation	2,257	52.7	6,294	43.8
Oil	530	12.4	287	2
Other	1,727	40.3	5,991	41.7
Capital Goods	1,56	34	5,316	37

Diversification of Colombia's Exports

¹ The data are from 1995.

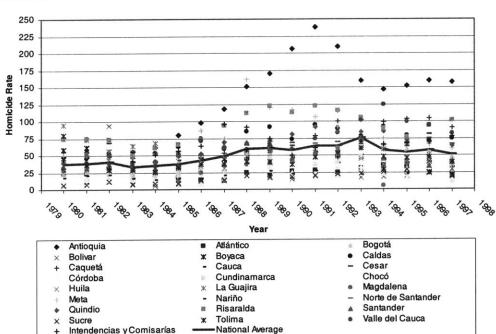
Source: DANE and "Historia Económica de Colombia." Page 493. Imprenta Nacional de Colombia. 1997.

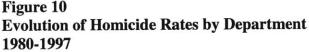
The period between 1980 and 1997 also represents a phase of significant changes in the size and structure of the government. Among the multiple transformations, there are two which are important to this study especially for their impact at the regional level: 1) decentralization, and, 2) the privatization of public entities and the participation of the private sector in areas traditionally managed by the state. Among the several repercussions of the decentralization process, it is important to highlight improvements in democratic participation. Indeed, in 1986, for the first time in the history of Colombia, mayors became publicly elected. And, in 1991, through the participation of diverse groups, the national constitution was amended. The new constitution established a united and decentralized country, with autonomy at the regional level and mechanisms for citizens to participate and control the public performance of the state at all levels of government. The privatization process has occurred in all areas of the government but particularly in four: 1) the productive sector with special emphasis in the extraction of minerals; 2) the financial sector with the transfer of publicly-owned banks to private hands; 3) social security with regions deciding and prioritizing their investments, and, lastly, 4) the development of infrastructure, particularly in the telecommunications sector (Ocampo, 1997).

5.2 Violence During This Period

The 1980's started with a relatively low homicide rate but this apparent tranquility did not last long. This period encompasses some of the most incredible episodes of violence as well as the highest average homicide rate in Colombia's history (see figure

10). Manifestations of this violence were numerous and extreme. Colombians witnessed an armed assault by the M-19 guerrilla group of the Justice Palace where more than 100 people were killed, and many others disappeared; four presidential candidates were assassinated, three of those within eight months; members of the left were exterminated; 120 car bombs were exploded between 1989 and 1993 as part of the battle between drug cartels; judges, policemen, and journalists were assassinated by *sicarios*, hired assassins; the territorial coverage by the guerrillas expanded, leading to more armed struggle; rightwing militias terrorized the rural population by committing mass massacres; disappearances, displacement, kidnappings, occurred; and, perhaps most strikingly, 355,102 Colombians died during these 17 years of conflict (Pardo, 1996).

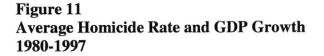


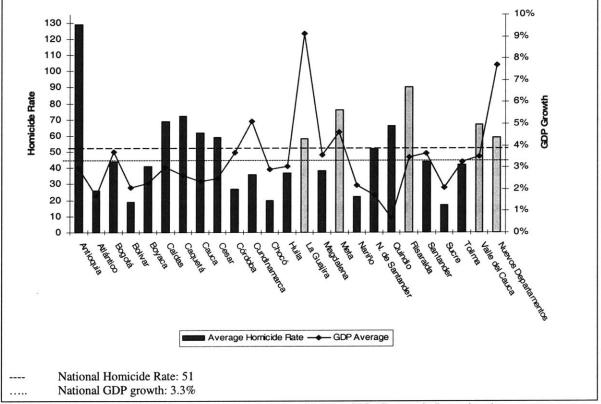


In the past two decades, much attention has been given to the concentration of violence in the urban areas. According to some studies, cities tend to have a higher

Source: Source: Policía Nacional and DANE.

proportion of violence due to, among other factors, poverty, internal migrations, spatial segregation, chaos, and poor planning (Ramirez, 1997; Camacho y Guzmán, 1990; Camacho, 1997; Rubio, 1997). According to reports prepared by the National Planning Department (DNP), in 1997, 70% of the violence was concentrated in urban areas. In challenging Rubio's (1995) assertion that low levels of GDP growth has coincided with high levels of criminality, this study analyzes the economic evolution at the regional level, and shows that such broad generalization do not apply to this particular case as high levels of GDP growth happened during periods in which criminality was high.





Source: DANE- División the Estudios Territoriales and DIJIN-CIC (Centro de Investigaciones Criminológicas), Revista Criminalidad, Policía Nacional.

5.3 High Growth and High levels of Violence: The Cases of La Guajira, Meta, Risaralda, Valle del Cauca, and Nuevos Departamentos.

<u>5.3.1 La Guajira</u>

In the past two decades, the department of La Guajira has undergone dramatic change mostly due to its production of coal. In 1977, Carbones de Colombia (CARBOCOL) signed a contract of partnership with International Colombia Resource Corporation (INTERCOR), a subsidiary of Exxon, to extract coal from *El Cerrejón*, the largest coal mine operation Latin America. This contract stipulated three stages for its development: 1) exploration (1977–80); 2) construction (1980–86); and, 3) exploitation (1986–2009). The whole operation currently involves the 38,000 hectares mine, a 150 km railroad with capacity for three locomotives, each pulling 100 cars carrying 100 tons of coal each from the mining area to the coast, and a port equipped to receive ships of 300 meters by 45 meters (Chomsky, 2002). As a result, the mining sector grew representing 10.2% of the GDP in 1980, to 42% in 1997.

The commerce sector continued with its trend of growth, however, at a slower rate. It is important to note that although its participation in the GDP grew from 7.65% in 1980 to 8.97% in 1997, in constant pesos the amount of revenue coming from this sector grew almost five times. As mentioned before, this department was used as a port of export of marijuana during the 1970's, and although marijuana lost its importance in the international market during the 1980's and 1990's, it can be argued that those formerly involved in the marijuana trafficking were now involved in the cocaine business.

Another sector that had a tremendous growth was the public utility service sector. This was mostly the result of the development of the infrastructure of the energy sector

for the provision of energy resources to other departments on the Atlantic Coast.

Additionally, the category of government services grew from 5.4% in 1980 to 11.4% in

1997. This means that the government was increasing its investment in education, health,

and basic social services in the department.

Table 8 La Guajira: GDP by Sector 1980-1997

1980	1984	1989	1994	1997
42.70%	28.13%	74.27%	51.71%	54.10%
7.18%	30.10%	5.76%	15.53%	11.89%
34.08%	30.51%	17.82%	34.59%	30.82%
	42.70% 7.18%	42.70%28.13%7.18%30.10%	42.70% 28.13% 74.27% 7.18% 30.10% 5.76%	42.70% 28.13% 74.27% 51.71% 7.18% 30.10% 5.76% 15.53%

Source: DANE- División de Estudios Territoriales and Cuentas Departamentales

5.3.2 Meta

This department saw during this period the development of the agro industry, particularly the cases of rice and palm oil. Meta became one of the most important producers of rice in Colombia by introducing mechanization processes from the preparation of the soil up to the recollection of the crop. But, while rice cultivation allows the participation of large enterprises as well as small landholders, the palm oil industry is vertically integrated; thus, those who own the land also own the industrial plants where the oil is extracted (Negret, 1989; Baquero, 1990).

The mining sector experienced an important growth especially in the exploitation of salt, gas and oil, and although its exploitation is not significant at the national level, it has brought, nonetheless, additional revenues to the department. Indeed, the mining sector grew from representing 0.63% of the total GDP in 1980 to 13.35% in 1997. In the tertiary sector, the government invested in the enhancement of the infrastructure by expanding and improving the conditions of the roads, by building new electric grids, and

by increasing the presence of governmental offices (Baquero, 1990). This governmental expenditure grew from representing 4.5% of the GDP in 1980, to 12% in 1997.

The cultivation and process of coca leaves fortified the presence of guerilla groups as well as paramilitary groups which meant an increase in the levels of violence which were particularly high in the late 1980's and early 1990's. And, although the economic impact of the drug money is difficult to measure, it probably helped the industrialization process in the agricultural and livestock sectors. Additionally, the increase experienced in the transport sector could also be a result of this activity.

Table 9	
Meta: GDP by Sector	
1980-1997	

1980	1984	1989	1994	1997
51.86%	45.24%	46.38%	45.90%	48.10%
9.34%	11.82%	16.70%	10.69%	9.72%
41.06%	44.47%	38.79%	37.29%	40.12%
	51.86% 9.34%	51.86%45.24%9.34%11.82%	51.86% 45.24% 46.38% 9.34% 11.82% 16.70%	51.86% 45.24% 46.38% 45.90% 9.34% 11.82% 16.70% 10.69%

Source: DANE- División de Estudios Territoriales and Cuentas Departamentales

5.3.3Risaralda

This predominantly coffee producing department experienced a sharp decline of its agricultural sector not only because of the decrease of coffee production but also because its non-traditional agricultural crops, such as pineapple, citrus, and beans experienced a decrease. Meanwhile, in the secondary sector, manufacturing experienced a decline, not only in GDP from representing 28.4% in 1980 to 15.22% in 1997 but also in absolute numbers. Among the companies that experienced the biggest contraction were those found in the garments, paper, and food and beverage industries. The decline of both sectors is a direct result of the liberalization policies implemented at the beginning of the 1990's. On the other hand, the utilities service sector as well as the

construction sector experienced a dynamic growth during this period. Indeed, the utilities services sector grew from 0.38% in 1980 to 2.60% in 1997; the activities related to commerce grew from 10.5% in 1980 to 12.97% in 1997. As shown in table 10, the tertiary sector had a dynamic expansion, particularly the governmental services.

It is important to note that starting in 1987 until 1993 when the homicide rate hovered around more than 100 per 100,000 inhabitants, all the sectors of the economy with the exception of the agricultural sector experienced growth.

Table 10Risaralda: GDP by Sector1980-1997

	1980	1984	1989	1994	1997
Primary Sector	26.95%	27.17%	26.31%	12.59%	11.66%
Secondary Sector	32.02%	30.67%	35.02%	28.48%	26.43%
Tertiary Sector	41.83%	42.89%	39.15%	53.38%	59.99%

Source: DANE- División de Estudios Territoriales and Cuentas Departamentales

5.3.4 Valle del Cauca

The industrial sector in this department has been traditionally the most productive sector, contributing a significant proportion to the national GDP. The region experienced a great a heyday during the duration of the import substitution model. However, the opening of the market at the beginning of the 1990's hurt the industrial sector which was not prepared to face international competition. In turn, the economy of the region in general experienced a decline. Particularly affected were the companies in the food and beverage, chemicals, rubber, and the metal-mechanic sectors. As a consequence, the region saw an increase in its level of unemployment. As shown in table 11, the primary and secondary sectors lost overall participation in the GDP. Agricultural activity was also affected by the opening of the market and crops like sugarcane and coffee

diminished their participation in the GDP. On the other hand, the construction and public utilities sectors experienced dynamic growth during this period and by the end of 1997 they represented 3.25% and 4.58% of the GDP respectively.

The tertiary sector expanded tremendously as can be seen in table 11, particularly the construction of rental housing. Indeed, at the beginning of 1980, this sector contributed 5.6% to the GDP and by the end of 1997 its participation had increased to 14.2%. The boom in the construction of housing and its rental is often attributed to the result of drug money being laundered.

One positive result of the opening of the markets for the economy of the region was the growth of the commercial sector. Revenues from activities in this area in absolute number more than doubled, and in terms of its representation in the GDP it grew from 10.3% in 1980 to 11.54% by the end of 1997. Additionally, other activities that experienced growth during this period were in communication, personal services, as well as governmental services.

Table 11Valle del Cauca: GDP by Sector1980-1997

<u></u>	1980	1984	1989	1994	1997
Primary Sector	18.03%	17.43%	19.11%	8.58%	9.46%
Secondary Sector	35.16%	35.11%	33.55%	28.99%	26.63%
Tertiary Sector	46.48%	47.78%	47.07%	59.70%	62.59%

Source: DANE- División de Estudios Territoriales and Cuentas Departamentales

5.3.5 Nuevos Departamentos²²

The forgotten regions of the east, the Orinoquian and Amazonian, which combined represent 57.6% of the territory of the country, had been largely ignored by the state until the constitution of 1991 gave them the status of departments. These scarcely populated and isolated departments have been the center of hydrocarbons as well as coca booms. In 1983, *Caño Limón*, the biggest oil well at the time was discovered, altering the development of the region. Located in the department of Arauca, this oil field is estimated to have 1.2 billion barrels. Additionally, Casanare, a next door neighbor, hosts the oil fields of *Cusiana, Cupiagua, and Floreña* which account for close to half of the country's total oil production (Governments of Arauca and Casanare, 2002).

Additionally, this region has experienced a cocaine boom, and with that the confrontation among groups involved in the business. Thus, violence rates almost doubled during the period analyzed.

Table 12Nuevos Departamentos: GDP by Sector1980-1997

	1980	1984	1989	1994	1997
Primary Sector	54.48%	51.95%	67.29%	60.94%	63.59%
Secondary Sector	5.45%	8.34%	7.37%	12.65%	11.88%
Tertiary Sector	34.48%	36.95%	23.74%	24.03%	22.11%

Source: DANE- División de Estudios Territoriales and Cuentas Departamentales

5.4 Patterns of Development

In this chapter, this study has shown again evidence to challenge the contention that violence deters economic growth. As a closer look of the economic structure of each

²² The departments grouped under this label are: Arauca, Casanare, Putumayo, San Andrés, Amazonas, Guainía, Guaviare, Vaupés, and Vichada.

of these five departments was taken, it has become possible to distinguish economic characteristics that might explain the reasons why this has occurred. This study argues that while a region is experiencing an economic boom, violence does not deter economic growth.

Three departments (La Guajira, Meta, and Nuevos Departamentos) experienced an incredible growth in the primary sector. Indeed, La Guajira continued its exploitation of coal, becoming the largest producer of coal in Latin America. Likewise, some of the departments included under the label Nuevos Departamentos have become the largest producers of hydrocarbons, particularly oil and gas, in Colombia. Additionally, important sources of gold and diamonds have also been found in the area. Although very rich, these departments have small economies, are sparsely populated, and have weak overall infrastructures.

The department of Valle del Cauca, for the third time, shows a paradoxical development. As previously explained in chapters 3, and 4, this department has a well established manufacturing sector, a strong and modern agricultural sector, and vibrant commerce and services sectors, in other words a strong economy. What makes it of special interest during this period is the economic boom experienced by the construction and housing rental sectors which is usually attributable to the presence of drug money in the local economy.

Although not as developed as the Valle del Cauca, the department of Risaralda has strong but small agricultural and industrial sectors. However, the boom experienced in this department occurred in the public utilities, communications, construction, and government services sector. This study argues that due to the privatization of tasks

previously performed by the government, private capital came to the department and was used in the development of infrastructure. Likewise, and due to the increment of the construction sector, it could be argued that drug money was being poured into the region. In sum, evidence shows that violence did not deter economic growth in five departments of Colombia during the period from 1980-1997, again challenging the assertion that violence deters economic growth. The explanation for this development can be found in the regional characteristics peculiar to these departments. Indeed, all five departments experienced an economic boom during the period analyzed. Thus, it seems that violence does not deter growth when a region is experiencing an economic bonanza. The following chapter will present conclusions, an analysis of the significance of the findings, and recommendations for future research.

CHAPTER 6- DISCUSSION AND CONCLUSIONS

6.1 Discussion of Results

In the previous chapters this study has argued that the contention that violence deters economic growth is not valid in the case of regional economic development in Colombia. The central thesis of this study is that there are instances when violence does not seem to impede the economic growth of certain regions. Indeed, results of the analysis of the effects of violence on regional economic development in Colombia indicate that violence does not deter growth when the region is experiencing an economic boom and when the beneficiaries of such a boom have created "informal institutional arrangements" allowing them to guarantee and protect their access to the wealth while clearing the path for the regional economic growth. During the periods analyzed: 1) 1938-1959; 2) 1960-1975; and 3) 1980-1997 the departments that featured levels of violence and economic growth above the national average consistently showed a dynamic growth in at least one sector.

The positive relationship between violence and economic growth has been explained as the consequence of the beneficiaries of the wealth fostering violence in their quest to maximize their profits. Moreover, while institutional theory argues that violence weakens the "formal" institutions and, therefore, deters economic growth, this study has argued that the strength or weakness of the formal institution is not a determinant for economic growth because beneficiaries of the wealth do not obey the norms but instead create their own "informal arrangements" that would guaranteed their economic prosperity.

This study has combined the approaches used by economists, political scientists, and sociologists to understand the effects of violence on regional economic development in order to show the relationship between violence and economic development. While economists relate violence with the behavior of the institutions and the economic incentives of crime, political scientists and sociologists stress the importance of the role and relationship among participating actors in the conflict. And, while this study acknowledges the contribution of these approaches to the understanding of the role of violence on economic development, it also suggests the need for further research in order to best understand the effects of violence on regional economic development. These future contributions might propose new solutions as to how to most effectively deal with the problem of violence at the regional level. Additionally, policy recommendations not only for the case of Colombia, but also for other countries that are suffering the devastating consequences of violence could be implemented.

6.1.1 First Period: 1938-1959

As shown in chapter 3, the Colombian economy experienced a profound transformation between 1938-1959 as a result of strong government intervention in the promotion of coffee as the main product for export, and the stimulation of a new industrial sector.

It has been shown that during this time, all the departments had positive growth, but two departments, Norte de Santander and Valle del Cauca, had levels of both violence and economic growth higher than the national average. Moreover, three departments, Caldas, Tolima, and Santander, important producers of coffee, had levels of violence

higher than the national average but low economic growth, while another three important producers, Cauca, Cundinamarca, and Huila, had levels of violence at the national average or slightly lower had high economic growth. The argument that the reason why the coffee producing regions did not have high levels of economic growth had to do with the volatility of the price of coffee has been advanced. While Tolima, Caldas, and Santander, the departments with low economic growth, had their economic revenues coming mostly from the production of coffee, Cauca, Cundinamarca, and Huila, the departments with high economic growth, had either only recently become coffee producers (Cauca and Huila) or had started diversifying their economies and beginning to become one of the most important industrial clusters in the country (Cundinamarca).

Additionally, it has also been argued that those seeking to secure access to land for the production of coffee were the main culprits of the violence generated during that period. Moreover, this study has challenged the traditional argument that violence during this period was a consequence of political animosity between the two main parties. It has also demonstrated that the reason behind the violence had to do with economic reasons instead of political ones.

In sum, this study has argued that during this period the coffee producing regions which featured high levels of violence did not show high levels of economic growth due to the volatility of the national and international price for coffee. It has argued and shown that the two departments that featured high levels of violence and economic growth were experiencing an economic boom in at least one of their economic sectors. Indeed, the department of el Valle del Cauca was not only experiencing an economic boom in the agricultural sector generating revenues from the production of sugar, but also

during this period this department experienced an enormous growth in its industrial sector. The other department, Norte de Santander, experienced an economic boom in the commerce sector due to its proximity to Venezuela which made it an important region for trade.

6.1.2 Second Period: 1960-1975

During this period the Colombian economy grew at an average rate of 5.24%, the highest of all the periods analyzed. Moreover, the fact that this growth coincided with the national development strategy of import substitution shows us that this strategy had more benefits than its detractors are willing to acknowledge.

This study has shown that during this time, six departments, Antioquia, Cundinamarca, La Guajira, Meta, Valle del Cauca, and Cesar, featured levels of violence and economic growth higher than the national average. Furthermore, through the analysis of economic as well of socio-political characteristics, this study was able to argue that there was a positive relationship between violence and economic growth due the presence of an economic boom in those departments. Moreover, it has been shown that two patterns of regional development became more evident, and that this pattern also helps in the understanding of why violence does not deter economic growth.

The departments of Antioquia, Cundinamarca, and Valle del Cauca had a wellestablished manufacturing sector, a strong and modern agricultural sector, and a vibrant commerce and services sector. By 1975, these three departments had a combined GDP that represented 51.7% of the national GDP. Additionally, by the end of the period analyzed, 42.8% of the total national population was living within these three

departments. On the other hand, the departments of Cesar, La Guajira, and Meta, unlike their counterparts, had relatively small economies whose combined GDP only represented 4.7% of the national GDP. Besides, by 1975, only 4.4% of the total population was living within these three departments. The departments of Cesar and Meta had a rapid expansion of the primary sector, particularly cattle farming, and the department of La Guajira experienced a surge in the secondary sector due to the commercialization of marijuana.

A process of land colonization advanced by the government to benefit those who were displaced by the violence during the 1940's and 1950's played an important role in the development of the relationship between violence and economic growth. Indeed, the departments of Meta and Cesar were labeled by the government as a new territory to be colonized. But once the new settlers were there and these regions were discovered to have fertile lands, large landowners moved in an applied the same methods of terror that had been used in the previous decades to displace settlers.

In the departments of Antioquia, Cundinamarca, and Valle de Cauca the rapid pace of modernization of the agricultural sector led to the concentration of land in the hands of few and helped the development of a strong agro-industry in those three departments. Additionally, the growth of the manufacturing sector attracted rural labor to cities that did not have the capacity to absorb nor provide basic services to the new influx, therefore leading to the creation of substandard housing around the cities, and the creation of an array of social problems.

In sum, this period featured six departments with levels of violence and economic growth higher than the national average. This study has demonstrated that the reason for

this was the result of an economic boom in at least in one of the economic sectors of each of these regions combined with socio-political characteristics that secured and protected the interests of those who were benefiting from this wealth. Moreover, this study has also demonstrated that a pattern of regional development was even clearer during this period. Indeed, the industrial concentration continued in the departments of Antioquia, Cundinamarca, and Valle del Cauca, while the rest of the country continued to lag behind these regions.

6.1.3 Third Period: 1980-1997

As shown in chapter 5, the period during 1980-1997 was marked by a deceleration of the GDP growth at the national level due in part to the world crisis of the 1980's. Additionally, this period represented a phase of significant changes in the size and structure of the Colombian government. Indeed, among the multiple transformations, two were important to this study especially for their impact at the regional level: 1) decentralization, and, 2) the privatization of public entities and the participation of the private sector in areas traditionally managed by the state.

During this period, nine departments in Colombia experienced economic growth higher than the national average, and of those nine, five departments - La Guajira, Meta, Risaralda, Valle del Cauca, and Nuevos Departamentos²³ - also had levels of violence that were higher than the national average. In addition, it is important to note that three of those departments - La Guajira, Meta, and Valle del Cauca - had also experienced high levels of violence and economic growth during the period from 1960-1975. As this study

²³ The departments grouped under this label are: Arauca, Casanare, Putumayo, San Andrés, Amazonas, Guainía, Guaviare, Vaupés, and Vichada.

has argued, the positive relationship between violence and economic growth was possible due to an economic boom that each of those departments experienced in at least one of their economic sectors during the period analyzed. This study has argued that this conditionally did not allow violence to deter economic growth in these regions.

Of the departments that showed levels of violence and economic growth above the national average, three departments - La Guajira, Meta, and Nuevos Departamentos experienced a boom in the exploitation of natural resources. La Guajira has become the biggest exporter of coal of all Latin America while the department of Meta and some regions of the Nuevos Departamentos have become important producers of oil. Moreover, these regions have become important producers of coca leaves, and the site for their transformation into cocaine. Both guerillas and paramilitary groups are present in these areas, and are fighting to gain total control of the areas for the protection and commercialization of the drug. Additionally, the state, in conjunction with paramilitary groups and foreign firms in charge of extracting the oil and coal out of Colombia, has embarked in a campaign of total annihilation of those perceived as threats. Thus, labor leaders, peasant organizations, and human rights activists have been assassinated while entire towns believed to be on top of wells have been bulldozed and their inhabitants left homeless.

The cocaine bonanza, although difficult to measure, also brought revenues into specific sectors of the economy in the departments of Risaralda and Valle del Cauca. These two departments experienced a rapid growth in their secondary and tertiary sectors. And while this study has argued that the main reasons for the growth of these two sectors had to do with the privatization of tasks previously performed by the government and the

decentralization of government resources, the growth of the construction sector is evidence of the presence of drug money being laundered in the local economy.

The department of Antioquia is an interesting case. During this period the average homicide rate was 129 while the rate for the national average was 51. This study has argued that it is only after a history of high levels of violence which affect the investment environment that a region starts lagging economically. The department of Antioquia between 1980's and 1997 was the center of a war between drug cartels, and the open confrontation of drug *mafiosos* against members of the police and the judicial forces in the city of Medellín. Likewise, in the banana producing region of Urabá, massacres in which hundreds of people were killed at once because of their suspected sympathies to guerrilla groups became monthly news.

6.2 Conclusions/Research Questions Addressed

This study has examined the effects of violence on regional economic development in Colombia and has found that violence does not impede economic growth while a region is experiencing an economic boom. Moreover, this study has challenged the assertion that if violence undermines the strength of the institutions that made for security of property rights, the growth of the economy is then weakened. Instead, it has proposed that the beneficiaries of the economic boom create informal institutional arrangements allowing them to guarantee and secure access to that wealth while at the same time fostering violence to keep new potential actors from participating in the wealth.

Through a careful analysis of not only the economic but also the socio-political characteristics of each of the regions, this study has been able to demonstrate why

violence did not hinder economic growth. Furthermore, it has argued that the reason for the violence was economic incentive rather than the reasons advanced by prior research. Indeed, during 1938-1959, violence was concentrated in the coffee producing regions because coffee at the time was the largest source of revenue and the most important export. During the next period, 1960-1975, violence was concentrated in the newly colonized areas in which rich land was discovered for the production of either agriculture, cattle farming, or mining. Additionally, it became evident that the regions that were becoming leaders in the manufacturing sector and the economic motor of the country were able to sustain higher levels of violence than other regions with weaker economies.

In addressing the research questions proposed through this study, it has been found that:

1) The reason why it has been possible for Colombia to grow economically while sustaining high levels of violence has to do with sources of economic revenues as well as the creation of additional informal institutional arrangements that have facilitated the path to economic growth, especially at the regional level, which in turn has a direct impact on the national economy. Historically, the relationship between violence and economic growth has been stronger in the areas where the region had experienced an economic boom either in the exploitation of coffee, oil, coal, cocaine, or bananas to name a few. This study has argued that the beneficiaries of these economic booms have fostered violence, and that if the formal institution gets in the way of their accumulation of wealth, they destroy that institution or create an informal one that would protect and guarantee their interests.

2) The relationship between violence and economic development has not been the same throughout the country. The regions that have wealth or have developed a source for wealth have a positive relationship with violence, while regions that are not economically attractive featured low levels of violence.

3) The regions that had shown a positive relationship between violence and economic growth had not lagged in their economic development. Instead what became evident is that Colombia featured few regions, not necessarily in the same geographical area, which have strong economies and are home for almost half of the population. These regions have historically displayed high levels of violence, in particular the department of Valle del Cauca. On the other hand, regions with smaller economies have shown to have a positive relationship between violence and economic growth when the particular region was experiencing an economic boom.

4) Regional patterns do offset the nature and character of Colombia's overall economic growth. These regional patterns of development are the reason why the country has been able to show positive signs of economic growth from 1938 until 1997. Indeed, the departments with a strong economy had been able to produce enough revenue to generate a positive national GDP growth. The question remains whether, when and if the investment environment becomes so unpredictable, violence will destroy all confidence to a point of no return.

6.3 Significance/Recommendations for Future Research

As the effects of violence on regional economic development in Colombia is an important issue for both theory building and practitioners, findings of this research will

be of interest to a wide cross section of researchers interested not only in Colombia but in violence and its effects on regional economic development in some other parts of the world. For those with an interest in the results of violence on the local economy, this study will be of interest as it analyzes not only the economic structure of the individual regions but also puts them in a context in which socio-political factors have been also considered. While other studies have analyzed the effects of violence of regional economic development for short periods of time or for particular sectors, this study has provided evidence that there is a positive relationship between violence and economic growth when the region is experiencing an economic boom.

Based on insights gleaned from the results of this study, the following agenda is suggested:

It is necessary to determine whether or not homicide rates capture the reality of violence in Colombia. If further evidence becomes available that this variable is insufficient measure of violence, alternative measurement indices must be developed.
 This study presents evidence that violence does not hinder economic growth when the region is experiencing an economic boom. However, future research should include the analysis of projected economic growth without violence in a context of social and political stability.

3) In this study, the role of the formal institutions was examined. It was found that these institutions are not a reliable tool to predict economic growth. Furthermore, it was argued that the formation of additional parallel institutional arrangements guaranteed the positive development path for the region. Future research should address whether the

formation of these parallel institutions only occurs under the condition of violence or also under different underlying structures.

4) Whether certain institutional arrangements and social characteristics are more salient in those regions with low levels of violence must be further investigated.

These suggestions coupled with the findings provided by this study will, hopefully, lead to further investigation and collaboration among researchers who seek to provide a framework for the understanding of the relationship between violence and economic development.

APPENDIX A

GDP by Economic Sectors 1938-1959

	1938	%	1939	%	1940	%	1941	%
Agricultural	37,375	50	37,974	48	38,835	48	39,362	48
Mining	3,246	4	3,527	4	3,921	5	3,790	5
Manufacturing	7,317	10	8,987	11	8,405	10	10,056	12
Artisan Manufacturing	1,876	3	2,289	3	2,120	3	2,495	3
Construction	2,852	4	3,527	4	3,827	5	3,827	5
Transportation	2,439	3	2,664	3	2,870	4	3,114	4
Energy, and other Services	413	1	450	1	469	1	488	1
Government	4,766	6	5,047	6	4,934	6	4,841	6
Commerce, finances	9,588	13	9,775	12	10,450	13	9,024	11
Income from rental	4,447	6	4,634	6	4,747	6	4,934	6
TOTAL GDP	74,319	100	78,874	100	80,578	100	81,931	100
	1942	%	1943	%	1944	%	1945	%
Agricultural	40,602	49	39,738	48	41,784	50	43,285	47
Mining	2,345	3	2,533	3	3,527	4	3,452	4
Manufacturing	10,413	13	10,544	13	11,839	14	12,308	13
Artisan Manufacturing	2,552	3	2,552	3	2,814	3	2,889	3
Construction	4,616	6	5,385	7	4,841	6	5,610	6
Transportation	2,852	3	3,058	4	3,452	4	3,846	4
Energy, and other Services	525	1	563	1	619	1	675	1
Government	4,953	6	4,991	6	5,197	6	5,103	6
Commerce, finances	8,162	10	7,843	10	3,518	4	9,381	10
Income from rental	5,085	6	5,235	6	5,422	7	5,591	6
TOTAL GDP	82,105	100	82,442	100	83,013	100	92,140	100
	1946	%	1947	%	1948	%	1949	%
Agricultural	46,249	46	47,955	46	48,070	45	51,185	44
Mining	3,396	3	3,602	3	3,377	3	4,053	3
Manufacturing	14,053	14	14,972	14	16,342	15	17,618	15
Artisan Manufacturing	3,265	3	3,471	3	3,734	3	3,959	3
Construction	6,379	6	5,103	5	5,366	5	4,578	4
Transportation	4,653	5	5,629	5	6,210	6	6,848	6
Energy, and other Services	826	1	901	1	976	1	1,107	1
Government	5,479	5	5,685	5	5,948	6	6,511	6
Commerce, finances	10,882	11	11,614	11	11,633	11	15,010	13
Income from rental	5,816	6	5,985	6	6,229	6	6,454	6
TOTAL GDP	100,998	100	104,917	100	107,885	100	117,323	100

GDP by Economic Sectors 1938-1959

	1950	%	1951	%	1952	%	1953	%
Agriculture	44,844	38	45,404	37	48,501	37	48,597	35
Fish and Hunting	144	0	147	0	156	0	162	0
Silviculture	360	0	378	0	399	0	430	0
Mining	4,172	4	4,653	4	4,672	4	4,886	4
Total Manufacturing	17,592	15	18,144	15	19,428	15	21,196	15
Industry		11	13,387	11	14,491	11	16,078	12
Artisan Industry		4	4,757	4	4,937	4	5,118	4
Construction	3,168	3	3,013	2	3,230	2	4,040	3
Commerce	18,513	16	19,202	16	20,186	16	22,817	17
Transportation	5,989	5	6,598	5	7,531	6	8,125	6
Communication	443	0	462	0	483	0	582	0
Utilities	570	0	608	0	665	1	745	1
Banking and other Services	2,133	2	2,188	2	2,546	2	2,723	2
Housing Rental	6,157	5	6,089	5	6,310	5	6,573	5
Personal Services	9,027	8	9,336	8	9,570	7	9,916	7
Government Services	5,504	5	6,094	5	6,356	5	7,149	5
TOTAL GDP	118,616	100	122,316	100	130,033	100	137,941	100
	1954 •	%	1955	%	1956	%	1957	%
Agriculture	1954 · 49,894	% 34	51,099	% 33	1956 52,724	% 33	55,954	34
Agriculture Fish and Hunting	and the second se	Carlos Contractor	A STATE OF SHITTED AND A DATA TO A SHITTED AND A	water and the second second		33 0	55,954 274	34 0
	49,894	34	51,099	33	52,724	33 0 0	55,954	34
Fish and Hunting	49,894 163	34 0	51,099 179	33 0 0 3	52,724 219 558 5,630	33 0 0 4	55,954 274 593 5,813	34 0 0 4
Fish and Hunting Silviculture	49,894 163 454	34 0 0	51,099 179 479	33 0 0	52,724 219 558	33 0 0	55,954 274 593	34 0 0
Fish and Hunting Silviculture Mining	49,894 163 454 5,027 23,175	34 0 0 3	51,099 179 479 5,157	33 0 0 3	52,724 219 558 5,630	33 0 0 4	55,954 274 593 5,813	34 0 0 4
Fish and Hunting Silviculture Mining Total Manufacturing	49,894 163 454 5,027 23,175	34 0 0 3 16	51,099 179 479 5,157 24,735	33 0 0 3 16	52,724 219 558 5,630 26,556 20,887 5,669	33 0 0 4 17	55,954 274 593 5,813 27,765 21,922 5,843	34 0 4 17 13 4
Fish and Hunting Silviculture Mining Total Manufacturing Industry	49,894 163 454 5,027 23,175 17,896	34 0 0 3 16 12	51,099 179 479 5,157 24,735 19,276	33 0 0 3 16 13	52,724 219 558 5,630 26,556 20,887	33 0 4 17 13	55,954 274 593 5,813 27,765 21,922 5,843 5,542	34 0 0 4 17 13 4 3
Fish and Hunting Silviculture Mining Total Manufacturing Industry Artisan Industry	49,894 163 454 5,027 23,175 17,896 5,279	34 0 3 16 12 4	51,099 179 479 5,157 24,735 19,276 5,459	33 0 0 3 16 13 4	52,724 219 558 5,630 26,556 20,887 5,669	33 0 4 17 13 4	55,954 274 593 5,813 27,765 21,922 5,843	34 0 4 17 13 4
Fish and Hunting Silviculture Mining Total Manufacturing Industry Artisan Industry Construction	49,894 163 454 5,027 23,175 17,896 5,279 5,270	34 0 3 16 12 4 4	51,099 179 479 5,157 24,735 19,276 5,459 5,668	33 0 0 3 16 13 4 4	52,724 219 558 5,630 26,556 20,887 5,669 5,862 24,983 10,167	33 0 4 17 13 4 4 4 16 6	55,954 274 593 5,813 27,765 21,922 5,843 5,542 24,491 9,829	34 0 0 4 17 13 4 3 15 6
Fish and Hunting Silviculture Mining Total Manufacturing Industry Artisan Industry Construction Commerce	49,894 163 454 5,027 23,175 17,896 5,279 5,270 25,497	34 0 3 16 12 4 4 17	51,099 179 479 5,157 24,735 19,276 5,459 5,668 25,302	33 0 0 3 16 13 4 4 17	52,724 219 558 5,630 26,556 20,887 5,669 5,862 24,983	33 0 4 17 13 4 16	55,954 274 593 5,813 27,765 21,922 5,843 5,542 24,491	34 0 0 4 17 13 4 3 15
Fish and Hunting Silviculture Mining Total Manufacturing Industry Artisan Industry Construction Commerce Transportation	49,894 163 454 5,027 23,175 17,896 5,279 5,270 25,497 8,989	34 0 0 3 16 12 4 4 4 17 6	51,099 179 479 5,157 24,735 19,276 5,459 5,668 25,302 9,976	33 0 0 3 16 13 4 4 4 17 7	52,724 219 558 5,630 26,556 20,887 5,669 5,862 24,983 10,167	33 0 4 17 13 4 4 4 16 6	55,954 274 593 5,813 27,765 21,922 5,843 5,542 24,491 9,829	34 0 0 4 17 13 4 3 15 6
Fish and Hunting Silviculture Mining Total Manufacturing Industry Artisan Industry Construction Commerce Transportation Communication	49,894 163 454 5,027 23,175 17,896 5,279 5,270 25,497 8,989 644	34 0 3 16 12 4 4 4 17 6 0	51,099 179 479 5,157 24,735 19,276 5,459 5,668 25,302 9,976 737	33 0 0 3 16 13 4 4 17 7 0	52,724 219 558 5,630 26,556 20,887 5,669 5,862 24,983 10,167 780	33 0 4 17 13 4 16 6 0	55,954 274 593 5,813 27,765 21,922 5,843 5,542 24,491 9,829 846	34 0 0 4 17 13 4 3 15 6 1 2
Fish and Hunting Silviculture Mining Total Manufacturing Industry Artisan Industry Construction Commerce Transportation Communication Utilities	49,894 163 454 5,027 23,175 17,896 5,279 5,270 25,497 8,989 644 819	34 0 3 16 12 4 4 17 6 0 1	51,099 179 479 5,157 24,735 19,276 5,459 5,668 25,302 9,976 737 900	33 0 3 16 13 4 17 7 0 1	52,724 219 558 5,630 26,556 20,887 5,669 5,862 24,983 10,167 780 1,013	33 0 4 17 13 4 16 6 0 1	55,954 274 593 5,813 27,765 21,922 5,843 5,542 24,491 9,829 846 1,087	34 0 4 17 13 4 3 15 6 1 1
Fish and Hunting Silviculture Mining Total Manufacturing Industry Artisan Industry Construction Commerce Transportation Communication Utilities Banking and other Services	49,894 163 454 5,027 23,175 17,896 5,279 5,270 25,497 8,989 644 819 3,272	34 0 0 3 16 12 4 4 4 17 6 0 1 2	51,099 179 479 5,157 24,735 19,276 5,459 5,668 25,302 9,976 737 900 3,625	33 0 0 3 16 13 4 4 4 17 7 0 1 2	52,724 219 558 5,630 26,556 20,887 5,669 5,862 24,983 10,167 780 1,013 4,197	33 0 4 17 13 4 16 6 0 1 3	55,954 274 593 5,813 27,765 21,922 5,843 5,542 24,491 9,829 846 1,087 3,507	34 0 0 4 17 13 4 3 15 6 1 2
Fish and Hunting Silviculture Mining Total Manufacturing Industry Artisan Industry Construction Commerce Transportation Communication Utilities Banking and other Services Housing Rental	49,894 163 454 5,027 23,175 17,896 5,279 5,270 25,497 8,989 644 819 3,272 6,861	34 0 0 3 16 12 4 4 17 6 0 1 2 5	51,099 179 479 5,157 24,735 19,276 5,459 5,668 25,302 9,976 737 900 3,625 7,218	33 0 3 16 13 4 17 7 0 1 2 5	52,724 219 558 5,630 26,556 20,887 5,669 5,862 24,983 10,167 780 1,013 4,197 7,608	33 0 4 17 13 4 16 6 0 1 3 5	55,954 274 593 5,813 27,765 21,922 5,843 5,542 24,491 9,829 846 1,087 3,507 8,032	34 0 0 4 17 13 4 3 15 6 1 2 5
Fish and Hunting Silviculture Mining Total Manufacturing Industry Artisan Industry Construction Commerce Transportation Communication Utilities Banking and other Services Housing Rental Personal Services	49,894 163 454 5,027 23,175 17,896 5,279 5,270 25,497 8,989 644 819 3,272 6,861 10,336	34 0 3 16 12 4 4 17 6 0 1 2 5 7	51,099 179 479 5,157 24,735 19,276 5,459 5,668 25,302 9,976 737 900 3,625 7,218 10,829	33 0 3 16 13 4 47 7 0 1 2 5 7	52,724 219 558 5,630 26,556 20,887 5,669 5,862 24,983 10,167 780 1,013 4,197 7,608 11,594	33 0 4 17 13 4 16 6 0 1 3 5 7	55,954 274 593 5,813 27,765 21,922 5,843 5,542 24,491 9,829 846 1,087 3,507 8,032 11,861	34 0 0 4 17 13 4 3 15 6 1 2 5 7

GDP by Economic Sectors 1938-1959

	1958	%	1959	%
Agriculture	57,716	35	60,615	34
Fish and Hunting	255	0	254	0
Silviculture	640	0	641	0
Mining	5,965	4	6,923	4
Total Manufacturing	28,997	17	31,409	18
Industry	23,004	14	25,236	14
Artisanl Industry	5,993	4	6,173	3
Construction	5,373	3	5,981	3
Commerce	24,590	15	27,222	15
Transportation	9,134	5	9,791	5
Communication	914	1	975	1
Utilities	1,170	1	1,336	1
Banking and other services	3,412	2	3,978	2
Housing Rental	8,482	5	9,085	5
Personal Services	12,334	7	12,779	7
Government Services	8,060	5	8,129	5
		100	470.110	100
TOTAL GDP	167,042	100	179,118	100

APPENDIX B

GDP by Economic Sectors 1960-1975

	1960	%	1961	%	1962	%	1963	%
Agriculture	23,637.1	30.5	24,690.6	30.1	25481.1	29.5	25649.2	28.9
Hunting and	147.3	0.2	252.5	0.3	280.8	0.3	282.9	0.3
Forestry	338.0	0.4	353.5	0.4	382.3	0.4	368.5	0.4
Mining	1,924.9	2.5	1,821.5	2.2	1,818.0	2.1	2,013.1	2.3
Industry	13,478.3	17.4	14,260.2	17.4	15,273.6	17.7	16,000.0	18.0
Construction	2,985.1	3.8	3,409.0	4.2	3,619.5	4.2	3,265.3	3.7
Commerce	12,906.5	16.6	13,556.2	16.5	14,249.9	16.5	14,712.5	16.6
Transportation	4,319.8	5.6	4,672.7	5.7	4,987.1	5.8	5,277.1	5.9
Communications	447.7	0.6	486.1	0.6	569.5	0.7	592.1	0.7
Utilities	810.3	1.0	825.0	1.0	988.3	1.1	1,065.8	1.2
Banking,	1,853.8	2.4	2,054.5	2.5	2,414.3	2.8	2,491.0	2.8
Housing Rental	3,917.7	5.0	4,193.2	5.1	4,462.2	5.2	4,768.5	5.4
Personal	5,994.1	7.7	6,153.2	7.5	6,389.1	7.4	6,751.1	7.6
Government	4,853.8	6.3	5,206.4	6.4	5,520.8	6.4	5,558.2	6.3
TOTAL	77,614.4	100	81,934.6	100	86,436.5	100	88,795.3	10
	1964	%	1965	%	1966	%	1967	%
Agriculture	27051.6	28.6	27077.4	27.6	27990.9	27.0	29428	27.
Hunting and	334.3	0.4	356.4	0.4	333.8	0.3	372.2	0.3
Forestry	371.5	0.4	381.0	0.4	420.5	0.4	438.9	0.4
Mining	2,174.9	2.3	2,298.4	2.3	2,204.6	2.1	2,245.3	2.1
Industry	16,949.0	17.9	17,745.9	18.1	18,929.3	18.3	19,608.7	18.
Construction	3,284.4	3.5	3,380.9	3.5	4,075.9	3.9	5,011.2	4.6
Commerce	15,879.7	16.8	16,595.5	16.9	17,840.1	17.2	18,049.2	16.
Transportation	5,535.7	5.9	5,724.2	5.8	6,090.7	5.9	6,143.8	5.7
Communications	683.0	0.7	756.7	0.8	831.1	0.8	918.6	0.8
Utilities	1,108.1	1.2	1,206.1	1.2	1,272.8	1.2	1,443.6	1.3
Banking,	2,837.2	3.0	2,993.6	3.1	3,129.2	3.0	3,246.7	3.0
Housing Rental	5,184.0	5.5	5,554.7	5.7	5,919.0	5.7	6,300.2	5.8
Personal	6,981.3	7.4	7,372.3	7.5	7,694.4	7.4	8,001.5	7.4
Government	6,186.5	6.5	6,524.8	6.7	6,791.1	6.6	6,973.2	6.4
								10

	1968	%	1969	%	1970	%	1971	%
Agriculture	31419.8	27.3	32486.1	26.6	33002.8	25.	33818.1	24.5
Hunting and Fishing	447.8	0.4	546.3	0.4	792.8	0.6	567.2	0.4
Forestry	450.5	0.4	467.3	0.4	510.4	0.4	550.0	0.4
Mining	2,191.5	1.9	2,559.3	2.1	2,546.2	2.0	2,565.2	1.9
Industry	20,824.7	18.1	22,349.9	18.3	24,210.9	18.	26,275.8	19.1
Construction	5,522.2	4.8	6,075.8	5.0	6,566.1	5.0	6,897.9	5.0
Commerce	19,276.4	16.8	20,625.9	16.9	22,392.8	17.	23,803.5	17.3
Transportation	6,474.7	5.6	7,002.1	5.7	7,699.8	5.9	8,049.1	5.8
Communications	991.3	0.9	1,066.7	0.9	1,184.2	0.9	1,329.2	1.0
Utilities	1,542.6	1.3	1,670.5	1.4	1,830.8	1.4	1,996.1	1.4
Banking, Financial	3,478.4	3.0	3,806.3	3.1	4,482.8	3.4	5,197.2	3.8
Housing Rental	6,674.5	5.8	7,070.6	5.8	7,335.0	5.6	7,819.1	5.7
Personal Services	8,418.4	7.3	8,917.2	7.3	9,523.3	7.3	10,161.3	7.4
Government	7,208.0	6.3	7,565.6	6.2	8,283.5	6.4	8,859.3	6.4
TOTAL	114,920.	100	122,209.	100	130,361.	100	137,889.	100
	1972		1973		1974		1975	Nota Ser
Agriculture	35797.1	24.1	37246.5	23.4	39923.1	23.	42565.1	24.1
Hunting and Fishing	1,578.4	1.1	1,330.0	0.8	1,018.5	0.6	1,092.3	0.6
Forestry	594.4	0.4	637.7	0.4	719.9	0.4	703.4	0.4
Mining	2,376.4	1.6	2,507.3	1.6	2,331.5	1.4	2,208.8	1.3
Industry	28,699.4	19.3	31,251.2	19.6	32,995.6	19.	33,932.0	19.2
Construction	7,032.0	4.7	7,884.0	5.0	8,190.0	4.9	7,912.0	4.5
Commerce	25,392.4	17.1	27,587.9	17.3	28,953.9	17.	29,558.5	16.7
Transportation	8,624.2	5.8	9,393.0	5.9	10,262.7	6.1	10,812.9	6.1
Communications	1,490.6	1.0	1,671.9	1.1	1,999.0	1.2	2,311.5	1.3
Utilities	2,244.3	1.5	2,483.0	1.6	2,644.4	1.6	2,783.1	1.6
Banking, Financial	5,769.9	3.9	6,237.5	3.9	7,198.3	4.3	8,195.6	4.6
Housing Rental	8,310.6	5.6	8,721.3	5.5	9,337.5	5.5	10,056.3	5.7
Personal Services	10,961.3	7.4	11,713.7	7.4	12,437.4	7.4	13,161.2	7.5
Government	9,757.0	6.6	10,529.7	6.6	10,775.1	6.4	11,184.9	6.3
and the second se								
			159,194.		168,786.		176,477.	100

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