RESEARCH REPORTS AND NOTES

ESCAPE FROM TERROR:
Violence and Migration in Post-Revolutionary Guatemala*

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Violence has permeated the Central American landscape for much of its history. Of the Central American republics, Guatemala, El Salvador, and Nicaragua have suffered most from violence in recent decades, and they are also the countries that have received the most scholarly attention. Recent analyses of violence have emerged from an array of disciplines ranging from ethnohistory to political economy and have focused on subjects as divergent as cold war politics and the problems of land tenure.[1]

One aspect of this scholarship has been analysis of recent increases in internal and international migration caused by political violence. Nora Hamilton and Norma Stolz Chinchilla made a key contribution to this literature by placing this increased migration within the context of the contemporary crisis in Central America (Hamilton and Chinchilla 1991). They argue that economic and political variables are not easily disentangled in migration analysis, particularly regarding Central America. That is, although violence clearly plays a role in the decision to migrate, it

1. This large body of literature includes Armstrong and Shenk (1982), Arnson (1982), Baloyra (1982), Berryman (1984), Black (1981, 1984), Carmack (1988), Chomsky (1986), Falla (1978), Frank and Wheaton (1984), MacLeod and Wasserstrom (1983), McClintock (1985), Melville and Melville (1971), Montgomery (1982), Painter (1987), Torres Rivas (1987), Williams (1986), and Woodward (1988).

may not be assumed that migration—whether internal or international—results purely from political rather than economic factors. As Hamilton and Chinchilla point out, "the combined effects of political crisis, war, and the economic crisis aggravated by political conditions have transformed a normal migration flow into massive displacement and exodus" (1991, 96).

Indeed, researchers to date have focused on identifying the impact of either political or economic factors on migration decisions. In an important research note, William Deane Stanley focused on the former, attempting to gauge the impact of political violence on international migration from El Salvador to the United States (Stanley 1987).[2] His time-series analysis of migration found that "political violence is at least an important motivation of Salvadorans who have migrated to the United States since the beginning of 1979. The fact that political violence variables account for more than half of the variance [in migration] . . . suggests that fear of political violence is probably the dominant motivation of these migrants" (1987, 147). Although Stanley included economic variables in several of his formulations, their coefficients were not statistically significant, and he dropped them from his regressions. This econometric strategy increases the degrees of freedom in estimation but at a cost: the effect attributed to political factors may be exaggerated due to the absence of variables controlling for economic factors.[3]

Our research note is in some sense the third in the trilogy of studies of Central American migration begun by Stanley and continued by Hamilton and Chinchilla. Our analysis builds on the important insight provided by Hamilton and Chinchilla and others that migration in Central America cannot be understood without factoring both economic and political dimensions into the analysis.[4] It also builds on Stanley's work in the sense of using empirical tools to answer the questions posed, especially in terms of measuring violence empirically. The present research note, however, will attempt to gauge empirically the impact of political *and* economic determinants of migration. Also, although international migration is important, several scholars have pointed out that internal

2. As Stanley (1987) has noted, the question analyzed is of enormous relevance for U.S. immigration policy because political refugees are entitled to special protection under U.S. immigration law, whereas the entry of "normal" immigrants is governed by quotas and regional preferences.

3. The direction of the bias imparted on the violence coefficients because of the omitted variables is not simple to predict in a multiple regression model. Were there only one regressor and one omitted variable, the signs of the estimated covariances between omitted and included variables would indicate the direction of the omitted variable bias. But when more than one variable is omitted or included, the direction of the bias depends on multiple regression coefficients, which themselves bear the sign of partial rather than simple correlations. See Greene (1990, 260–61).

4. See also Richmond (1988); and Zolberg, Suhrke, and Aguayo (1986, 1989). The first two are cited by Hamilton and Chinchilla (1991).

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migration may be an even more significant defensive response to violence.[5] This essay will therefore focus on the response of internal migration to economic and political factors, taking as a case study migration in Guatemala from 1976 to 1981. The period and the country were not chosen at random. Guatemala has experienced a long history of political violence, but the brutal violence that prevailed in the late 1970s and early 1980s reached unprecedented levels.

To place the period to be analyzed in historical context, a short history of political violence in Guatemala will be presented, along with a typology for analyzing the evolution of violence. The next section integrates political violence theoretically into a widely accepted economic migration model. This model permits empirical analysis of economic and political determinants of migration in a unified framework, a task accomplished in the third section. The concluding section outlines the implications of this study for migration modeling and policy design.

VIOLENCE IN GUATEMALA

Violence has been relatively constant in Guatemalan politics. Since colonial times, it has been motivated at least in part by racial and ethnic conflict. Acting on behalf of a Hispanic and European economic elite, the state has used its repressive capacity to control the Mayan and mestizo majority. This repression has engendered a long history of Mayan and campesino uprising and resistance, which has in turn exacerbated the paranoia of Guatemalan elites and their repression of indigenous peoples.

In addition to the racial roots of the conflict, economic motivations have also played a role in Guatemalan political violence. The periods of greatest violence in Guatemalan history (the conquest, the Liberal era, and the military dictatorships of the postrevolutionary period) have all been characterized by economic innovation and expansion. The correlation between economic "modernization" and violent conflict has been well studied (see Moore 1966; Eisenstadt 1978; Hagopian 1974; Migdal 1974; Paige 1975; and Skocpol 1979). This link has often been invoked by historians and social scientists writing on Guatemala (see Dunkerley 1988; McCreery 1990; Torres-Rivas 1985).

Attacks on the rural popular sector have also been perpetrated to force migration and thus manipulate the agricultural labor force and the system of land tenure. Numerous historical and contemporary examples can be cited of campesinos being removed violently from their land in the

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5. According to Zolberg et al., internally displaced refugees account for 39 to 41 percent of all Guatemalan refugees and for 37 to 49 percent of all Central American refugees (Zolberg et al. 1989, 212). Beatriz Manz argues that internal refugees outnumber externally displaced refugees (see Manz 1988, 61).

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name of economic development.[6] In recent decades, forced migration has provoked land disputes between campesinos and landed elites that have quickly escalated into violent conflict.

Anecdotal evidence also points to a strong correlation between migration and violence in Guatemala. Particularly in the late 1970s and early 1980s, the "scorched earth" tactics of the military regimes of Romeo Lucas García and Efraín Ríos Montt were monitored and frequently denounced by international human rights organizations.[7] These groups and scholarly observers as well have reported numerous mass exoduses from persecuted communities.

Cycles of Violence

Most of the theoretical scholarship on political violence is directly concerned with "nonauthoritative" violence: the kind committed by those outside the existing political and economic power structure. In other words, scholars have focused primarily on "rebellion" as the initiation of "revolution." This research note will consider both nonauthoritative and authoritative (state-sponsored) violence.[8] Authoritative violence has been particularly pervasive in Guatemala, as has been documented in the large body of literature describing state-sponsored violence in contemporary Guatemala.[9]

Although violence has been almost endemic to Guatemala, it has followed a cyclical pattern in recent decades. The cycle begins with what Mark Hagopian has termed "societal disequilibrium," which results when

6. The most documented contemporary case of campesino displacement resulted from nickel exploitation in the northeastern region of Guatemala. The violence of the 1960s and 1970s has also been linked convincingly by Robert Williams (1986) to expansion of the cattle and cotton industries. Many historical antecedents can be found during the colonial period and the Liberal era for this relationship between economic development and forced migration. *Repartimientos* and *reducciones* were commonplace in the colonial period, as were forced migration and vagrancy laws in the Liberal period, which were tied to expansion of the coffee industry. See Pinto Soria (1981), Sherman (1979), McCreery (1983, 1990), and Swetnam (1989).

7. These groups included Americas Watch, Amnesty International, Oxfam International, the North American Conference on Latin America, Cultural Survival Inc., the International Work Group for Indigenous Affairs, and Survival International.

8. It is necessary to clarify what constitutes authoritative violence when official or state-sponsored vehicles are not used to perpetrate the violent acts. Death-squad activity is often "authorized" by the state, even when the perpetrators are not wearing police or military uniforms or are officially "off-duty." In instances in which the violence is not directly authorized by recognized state institutions (as with the MLN's "Mano Blanca" in Guatemala during the 1960s), it will be "authoritative" only if those who authorize the violence occupy official roles in the political power structure and authorize such violence as a response to nonauthoritative violence or as means of preserving the status quo. Thus death-squad activities in Central America during the 1960s and 1970s would fall mostly into the category of authoritative violence. But in Colombia, narco-terrorism aimed at popular sectors or the killing of street children or homosexuals by right-wing paramilitary organizations would not exemplify authoritative violence.

9. See the works cited in note 1.

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agriculture is modernized, landholdings are concentrated, agricultural workers are forced to become wage laborers, and basic consumption drops for most citizens. This common observation has been made by historians, political scientists, and sociologists studying developing regions, particularly Latin America (see Burns 1980; Williams 1986). Such economic changes prompt violent conflicts, particularly between campesinos and large landholders. This rather spontaneous violence we will refer to as "nonauthoritative turmoil." A conspiracy (an organized guerrilla response) may also arise, at the same time or soon after the initial turmoil. The armed forces' reaction to this turmoil and a possible nonauthoritative conspiracy is to initiate an authoritative violent response. Thus at this stage, the violence is simultaneously authoritative and nonauthoritative. The situation then evolves into a "dialectic" between insurgency and counterinsurgency. Donald Schulz defined this process as "an extended sequence of actions and reactions . . . , of threats and retaliations" (Schulz 1984, 28). At some point, state-sponsored violence exceeds the boundaries of retaliation to become genocide. Eventually, these assaults lessen in intensity and frequency until the quiet rumblings of turmoil begin anew.

The First Cycle (1960–1973)

Two complete cycles of violence have occurred in postrevolutionary Guatemala. Each one peaked when the violence evolved into authoritative (state-sponsored) genocide.

After the death of President Carlos Castillo Armas in 1957, his Movimiento de Democracia Nacional (the MDN, which was rooted in his army of liberation) decided to back as its presidential candidate Castillo Armas's Interior Minister, Miguel Ortiz Passerelli. Perennial presidential hopeful General Miguel Ydígoras Fuentes returned to Guatemala from his post as ambassador to Colombia to run against the MDN candidate. He founded a new party, the Redención Democrática Nacional (RDN, or simply Redención) and proclaimed an appealing platform calling for national reconciliation and an end to political violence. In the October 1957 election, when the MDN-controlled electoral tribunal announced the winner as Ortiz Passarelli, Ydígoras mobilized his followers in street demonstrations and threatened a coup. A new election was held in January 1958, and Ydígoras claimed his victory.[10]

The first cycle of violence began with the rumblings of nonauthoritative turmoil in Guatemala following the election of Ydígoras in 1958. Public demonstrations, including mass mobilizations of labor unions, occurred frequently throughout the Ydígoras administration (Handy

10. The MDN candidate in the January election was Colonel José Luis Cruz Salazar. For further details on this campaign, see Schlesinger and Kinzer (1983, 236–37) and Handy (1984, 152).

1984, 152). These rumblings intensified at the beginning of the 1960s, a decade marked by rapid "development" and economic growth in the agricultural sector. This trend signified a further shift in the agricultural sector away from independent production (for subsistence) to wage labor and plantation agriculture in cotton, cattle, sugar, and coffee (see Williams 1986).[11] As Carol Smith noted, the last formal barriers to the free factor movement—labor and capital—had been removed (1983, 12). By the 1970s, all campesino households were at least partially connected to a capitalist market. It was the shift in land tenure and land use (away from peasants and subsistence), combined with changing levels of consciousness accompanying integration and proletarianization, that prompted violent turmoil.

Coinciding with this spontaneous unrest was the formation of the first Communist revolutionary movement, the Movimiento Revolucionario 13 de Noviembre (MR-13). Its guerrilla army, the Fuerzas Armadas Rebeldes (FAR), began operations in 1962, led by two disgruntled army officers, Lieutenant Luis Turcios Lima and Captain Marco Antonio Yon Sosa. The already tense situation quickly escalated into an interchange of violence between guerrillas and the military. Meanwhile, the success of the Cuban Revolution exacerbated the fears and anti-Communist sentiments among elites and within the Guatemalan military. Because Ydígoras was perceived as being "soft on Communism," anti-Communist officers staged several unsuccessful coup attempts in the early 1960s. Finally in 1963, Colonel Enrique Peralta Azurdia, Ydígoras's own defense minister, succeeded in removing him.

During the three-year administration of Colonel Peralta, the Guatemalan military consolidated its power. He also organized a new right-of-center, anti-Communist political party, the Partido Institucional Democrático (PID), and promulgated a new constitution in 1965.

When new elections were held in 1966, however, Julio César Méndez Montenegro, the civilian candidate for the Partido Revolucionario (PR), was elected despite attempts by Peralta and the PID to manipulate the election in their favor.[12] But the reformist tendencies of the PR and Méndez Montenegro could not neutralize the power of the armed forces: the military remained in firm control throughout the four-year civilian term.

As guerrilla activities intensified, so did military repression. Dur-

11. The changes in agricultural structure were most prejudicial to smallholders, who were already disillusioned by the rollback of President Jacobo Arbenz's agrarian reform program.
12. The PR arose from the October Revolution of 1944. In the mid-1960s, the party was led by civilian politician Mario Méndez Montenegro, who seemed willing to ally himself and the PR with the military and was therefore allowed to register the party officially for the 1966 elections. Mario died of an apparent suicide before the elections, however. His brother Julio César Méndez Montenegro ran as the PR candidate but did not ally himself with the military during the campaign. Nevertheless, after winning the election, Julio César Méndez signed an agreement with the military promising not to interfere in military affairs.

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ing these years, the army greatly expanded its control over rural areas. By 1966 more than nine thousand rural military commissioners were stationed in villages throughout Guatemala (Handy 1984, 161). And by that same year, the "Mano Blanca" death squad, composed of "off-duty" military and police personnel and purportedly linked to the party of the landholding elites (the Movimiento de Liberación Nacional or MLN), had begun to operate. Within the next two years, at least seventeen new death squads appeared. Most of these paramilitary organizations arose out of collusion between economic elites and the military. Death-squad activity and authoritative genocidal assaults against the unarmed rural populace became commonplace. In sum, the armed forces were beginning to go beyond armed confontations, and the violence began to resemble genocide.

In 1970 the leader of the counterinsurgency campaign, Colonel Carlos Arana Osorio, was elected president, bringing to an end the brief experiment in "civilian rule." This outcome represented a clear assertion of military dominance, and the pattern of genocidal assault continued through 1972 (Schlesinger and Kinzer 1983, 153–64; Yates 1988, 59).

The Second Cycle (1972–1985)

The second cycle began with the founding of the Ejército Guerrillero de los Pobres (EGP) in 1972. It was composed largely of survivors of the failed guerrilla movements of the 1960s, including members of the Frente Guerrillero Edgar Ibarra (FGEI), the third wing and most indigenous faction of the FAR who earlier had fled Guatemala to escape the army. On returning to Guatemala in 1972, the EGP organized into three distinct fronts in the Western highlands. Its ideology was certainly influenced by Marxist thought, but the "indigenista" focus allowed its members to create a much broader rural indigenous base of support than had been established in the 1960s. Thus by late 1973, an internal war had begun that involved substantially larger numbers of combatants (Concerned Guatemala Scholars 1985, 19–21).

After General Arana's fraudulent election in 1970, he appointed General Efraín Ríos Montt as Army Chief of Staff. Like Arana during the previous administration, Ríos Montt became deeply involved in "counterinsurgency" operations. Arana replaced him in 1973 with General Kjell Laugerud García, who became the army's presidential candidate and was named president in yet another rigged election in 1974.

Despite the circumstances surrounding Laugerud's rise to power and his association with counterinsurgency under Arana's "hard-line" administration, Laugerud initially presided over one of the least repressive periods in postrevolutionary Guatemala. He distanced his administration from the elitist MLN and its death-squad activities. He also moved away from his original sponsor, General Arana, by allying his govern-

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ment with the Christian Democrats and other moderate political parties and popular organizations. Arana, not easily contained, instigated a new wave of terror and repression by the end of Laugerud's term in 1978. Thus Laugerud proved unable to restrain the army.

The earthquake of February 1976 became a turning point for the Laugerud administration and also for popular organizations. Because the earthquake caused such severe homelessness among the poor, the disaster was referred to as a "class earthquake." New, nonviolent popular organizations emerged to offer communal responses to the devastation and to serve as conduits for international aid. Traditional divisions based on urban-rural and Indian-ladino distinctions were weakened by the relief effort (see Fernández 1988, 7–8). This blurring fostered a heretofore unknown level of class consciousness among the rural population—a severe threat to the Guatemalan military. The very existence of popular organizations was viewed by the military as a potential political base for insurgency, and together with the threat of increasing class-consciousness, it triggered a new wave of repression. By 1978 the Guatemalan armed forces were going beyond the conventional limits of civil war to begin the most horrific genocidal campaign in modern Guatemalan history (Fried et al. 1983; Handy 1984, 172–76).

Following several months of targeted assassinations of labor leaders and popular organizers, miners from the town of Ixtahuacan began a march of three hundred kilometers to the capital to protest the closure of their mine. Simultaneously, sugar refinery workers began to march from the southern coastal plain. As their marches progressed, the two groups gained widespread support from many sectors. Largely because of significant media coverage and the mobilization of campesinos, the dispute was settled in favor of the miners before they reached Guatemala City. They continued marching nonetheless to demonstrate solidarity with the sugar workers. When both groups arrived in Guatemala City on 19 November 1977, more than a hundred thousand workers and campesinos staged a demonstration in front of the presidential palace. Workers in other parts of the country also gathered to support the demonstrators (Albízurez 1980, 145). By far the largest popular demonstration since 1954, it also marked a turning point in the evolution of violence. After this show of strength, government strategy changed from a policy of targeted assassinations to more generalized terror.

In the 1978 election, General Arana backed his protégé, General Romeo Lucas García. Despite widespread claims of election fraud, Lucas came to power in March of that year. His term (1978–1982) bracketed the bloodiest years in recent Guatemalan history.[13] Thousands of cases of

13. A new death squad emerged soon after the election, one that was autonomous of the MLN and closely associated with Lucas himself. This Ejército Secreto Anti-Comunista

human rights abuses by the military were documented for this period. The most famous was the massacre in Panzós, which took place only three months after Lucas assumed the presidency, claiming the lives of more than a hundred campesinos.[14] In the years following the massacre, human rights abuses increased in frequency and intensity. Many individuals fled violence-prone regions to seek safety elsewhere, either within Guatemala or across the border in Mexico.

By 1985 a series of military coups and the military government's decreasing legitimacy resulting from repression and economic hardship forced the army to relinquish control of the presidency. By the 1985 civilian elections, violence had again subsided. At such short range for hindsight, it is difficult to determine exactly when the third cycle of violence began, but rumblings of "turmoil" and the rejuvenation of guerrilla movements seem to emerge in the late 1980s. It now appears that Guatemala is experiencing an "internal war," yet another "dialectic of violence." If this cycle follows historical trends, a new genocidal campaign may soon follow.[15]

THE MICROECONOMICS OF VIOLENCE AND MIGRATION

As outlined in the introduction, this research note seeks to examine both political and economic determinants of migration during a period when violence was reaching genocidal levels. Because violence and its effect on migration will be embedded in a standard economic model of migration, it is useful to describe briefly this economic approach to migration modeling. Economists often model individual decisions to migrate as a process of expected wage maximization: an individual compares the wage he or she is earning in the present location with that available in a potential destination, adjusted for the probability of finding a job in the destination area. This framework for analyzing migration, originally developed by John Harris and Michael Todaro (1970, 126–42), has spawned a large literature. The basic theoretical model has been

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(ESA) quickly became the most infamous death squad in Guatemalan history. Little effort was made to hide its widespread and brutal activities or to disassociate it from those of the military and the national police.

14. For accounts of this massacre, see IWGIA (1978), Mendízabal (1978), and Aguilera Peralta (1983).

15. A new cycle of violence probably began again about 1988. It is difficult to predict whether and when a crescendo of reactionary assault will start. Human rights abuses perpetrated by the military continue unabated as of late 1993. See Americas Watch (1990); Lindsey Greeson, "Political Violence Up in Guatemala in Recent Months," *The New York Times,* 13 Nov. 1988; George Lovell, "Democracy a Slim Hope in Guatemala," *Toronto Star,* 2 Sept. 1991; National Academy of Sciences (1992); WOLA (1989, 1993); and WOLA, "Guatemala: A Test Case for Human Rights Policy in the Post Cold-War Era," WOLA brief, 12 Mar. 1989. Updated information on human rights abuses can be found in Kennedy Center for Human Rights (1993).

adapted to allow for a host of real world complexities.[16] Many empirical analyses of interstate migration have been based on the Harris-Todaro model. All these theoretical modifications and empirical applications, however, retain the core assumption that migrants maximize expected incomes and choose their residence accordingly. Because it is difficult to analyze the effects of violence on migration decisions within the confines of a framework of expected-income maximization,[17] this research note will use a more general approach. Instead of assuming that individual migrants maximize expected income, we posit only that migrants maximize their own utility (well-being).[18]

Maintaining that individuals maximize their utility is only the first step. The next is to specify what goods, services, and "states of the world" affect individuals' utility. Neoclassical utility functions generally include variables that measure the consumption of goods and services. In theory, there is no limit to the number of distinct goods included: individuals could consume wheat, shoes, housing, transportation services, televisions, and more. In practice, utility functions often contain only two goods in order to simplify the analysis. Such a simplification has been made here. The first good is a composite economic good that represents all the goods and services that individuals consume. We call this somewhat prosaically the "consumption good." Because the purpose of this research note is to examine the effect of violence on migration, another good must be included to represent the lack of such violence. This good is termed "safety." Thus the two goods that enter individuals' utility functions in our analysis are the consumption good and safety. Our assumption is that individuals use their incomes to purchase the consumption good and safety in combinations that yield maximum utility. That is, individuals take into account the cost of the consumption good and safety and then decide how much of each to buy in order to achieve the highest possible level of personal well-being.

The concept of buying safety from violence may require some

16. These complexities include less than instantaneous turnover in urban modern jobs (Blomquist 1978), agglomeration economies in urban areas (Shukla and Stark 1990), family-unit decision making (Stark 1983), falling educational levels of rural-urban migrants (Cole and Sanders 1985), a mobile capital stock (Corden and Finlay 1975), human capital (Djajic 1985), and production uncertainty (Ingene 1989).

17. Such analysis is difficult in the sense that this kind requires specification of a multi-period model. Such a model might take the following form: expected incomes from future periods are discounted to their present value, reflecting the fact that a dollar tomorrow is not worth as much as a dollar today. To the extent that violence is likely to prevent an individual from earning incomes in future periods, violence reduces the expected streams of future income, thus decreasing also the present value of these flows.

18. While this assumption is a weaker behavioral one to make, it still presumes individual optimizing behavior. In other words, our explanation for internal migration remains within the bounds of standard microeconomic theory. Note that the two types of optimizing behavior may yield quite different results: an individual may maximize his or her utility by moving to an area with lower expected income but more peace and tranquility.

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explanation. Individuals "buy safety" in the sense that they take steps to avoid being the target of political violence. Relatively wealthier individuals may hire bodyguards, purchase bulletproof automobiles, and install elaborate security systems in their homes. Poorer individuals may undertake less costly measures such as not sleeping at home (so that army patrols or paramilitary units cannot locate them), paying small bribes, or contributing produce to local police, army, or guerrilla representatives in order to buy protection or immunity from violence.

Safety from political violence is obtained at the individual level. Thus two individuals who spend equal monetary amounts on obtaining safety may not enjoy equal amounts of safety. The reason could be that the two either display different personal characteristics that make one of them more prone to suffer political acts of violence or that they diverge in their abilities to "produce" safety or live in different locations with varying levels of violence.

Any increase in politically motivated violence in a region lowers the amount of safety enjoyed by most individuals in that area. Given an increase in violence in a region, potentially affected individuals must make a choice: to remain in the region and reconcile themselves to a lower level of utility, or to migrate from the region to some other location having a lower level of political violence.

The option that any individual chooses will depend on the three factors mentioned above. Those best able to produce safety are the most likely to stay, as are those whose personal characteristics make them least likely to be victims of politically motivated violence. The individuals best able to produce safety include those with more financial and educational resources because money and literacy allow individuals to access safety-producing resources like government agencies, legal services, trade unions, and other advocacy organizations. In addition, cash or other economic resources are necessary for bribing relevant representatives. Within the context of violence characterized by targeted political assassinations (as opposed to more random massacres), the least likely targets of violence are individuals living in rural areas with few or no guerrilla or trade-union ties, women, and the less-educated.[19]

Those who face large costs associated with migration also are likely to stay, while those facing low migration costs are most likely to leave. Several factors affect an individual's cost of migration. First is the distance that will have to be covered in the move. Economists have long used distance as a proxy for the economic and psychic costs of migration, based on the assumption that longer distances imply greater costs (see

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19. Ironically, while the more educated individual has access to resources which would allow more effective production of personal safety, this same ability also makes him or her a more likely target.

Yap 1977; Mazumdar 1988). Second, repeat migrants may face lower costs than first-time migrants because the former may already possess information about job-search strategies and labor-market conditions in destination areas (see Herzog, Hofler, and Schlottmann 1985). Migrants with familial or other personal contacts in destination areas face lower economic and psychic costs, as do more educated individuals (Yap 1977). Finally, in Guatemala ladinos confront lower economic and psychic costs than do indigenous Mayans, who face the potential losses of ethnic identity and membership in the village community. Indigenous migrants also tend to be more isolated, geographically and culturally, and thus have access to less information, factors that we term "higher information costs" (Zavark 1967, 49).

Given an increase of violence in a region, then, some individuals will choose to migrate while others will choose to stay. The decision criterion employed by individuals in this model is simple: if potential utility (well-being) in any destination area (any other Guatemalan department) exceeds actual utility in the origin area, migration occurs. The next section will empirically test whether this model is a reasonable representation of Guatemalan reality.

AN EMPIRICAL INVESTIGATION OF THE EFFECT OF VIOLENCE ON INTERNAL MIGRATION: GUATEMALA, 1976–1981

Perhaps the simplest question that could be addressed empirically is: Is politically motivated violence a key determinant of internal migration flows within Guatemala? An interstate migration model has been used to answer this question. Standard interstate migration models seek to explain migration flows by regressing the probability of migrating from one state to another on wages, unemployment rates, and other relevant factors in both source and destination states.[20] The dependent variable—the probability of migration from one state to another—is defined as the number of migrants from the source state to the destination state, divided by the population in the source state who did not migrate.[21] To this standard model we added several measures of violence, including politically motivated killings and "corpses found," a category meaning bodies of individuals who were killed for some political end.[22]

20. Typical examples of the use of such models are Fields (1979), Levy and Wadycki (1974), and Schultz (1971).
21. This way of defining the dependent variable assures its being a true probability, that is, that the sum of the migration probabilities from all states plus the probabilities of not migrating add up to one. This definition of the dependent variable allowed us to estimate a polytymous logistic model (a type of multiple-choice model) using the simple technique of ordinary least squares. For more detail on this technique, see Schultz (1982).
22. The data on violence in this analysis come from Aguilera Peralta et al. (1981).

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The former measure includes killings by paramilitary groups, the security services, and guerrilla organizations.[23]

In absolute numbers, the urban department of Guatemala recorded the largest number of politically motivated killings, 538 between 1966 and 1976. In the same period, the departments of Solola and Totonicapán suffered the fewest killings, with one in each department. But in terms of killings per capita, the department of Guatemala ranked only sixth. The four departments ranking highest in per capita killings—Zacapa, Chiquimula, Jalapa, and Izábal—are all located on or near Guatemala's northeastern border with Honduras. The measure entitled "corpses found" is an important indicator of the level of state-sponsored terror, regardless of the victim's department of origin. Death squads and the military often deposited a mutilated corpse in a conspicuous place as a warning or threat—an integral part of the overall campaign of terror. The department of Guatemala also had the greatest absolute number of corpses found, while only one corpse was found in Huehuetenango during the entire ten-year period. But again, per capita numbers tell a somewhat different story. The department of Guatemala ranked sixth again, with El Progreso first and Zacapa second. Use of this measure reveals a notable concentration of violence along the Honduran border. In addition, two of the top four departments in this category—Escuintla and Santa Rosa—are located on the Pacific coast of Guatemala, and like El Progreso, they lie adjacent to the department of Guatemala.

The variables used to capture the economic determinants of migration are standard. Levels of unemployment in source and destination regions were entered into the migration equation as part of an expected wage term.[24] Source and destination wages normally would complete the definition of an expected wage term, but because wage data are not available on a regional basis for Guatemala, per capita government tax receipts were used as a proxy for wages. The assumption here is that to the extent that higher wages increase consumption of goods and services, increased sales tax receipts will increase government revenues collected

23. The distinction between targeted political assassination and large-scale massacre is important here. The data on violence are for the period between 1966 and 1976 (which was characterized by targeted political assassinations), while the data on migration cover 1976 to 1981. Thus the empirical investigation will capture migration decisions made only on the basis of the cumulative effect of targeted violence over the earlier period. In particular, the effect on migration of the many documented massacres that occurred during the latter period will not be captured empirically. Clearly, this applicability is a shortcoming of the data on violence, but no source offers a departmental-level breakdown of violence for the period from 1976 to 1981. To the extent that violence is shown to affect migration despite the shortcomings of the measure of violence, it is plausible to argue that this study understates the true effect of violence on migration.

24. The expected wage is equal to the product of the going wage in the destination area times the probability of obtaining this wage. The expected wage thus accounts for the presence of unemployment in destination areas.

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in a given department. Distance between source and destination departments was entered to approximate the economic and psychological costs of migrating. It was measured in a simple way: geographically contiguous departments were assigned a distance dummy variable with a value of zero, while noncontiguous departments were given a distance dummy variable equal to one.

Literacy was included in attempt to measure the quality of the labor force in source and destination departments. Literacy may also be viewed as indicating the quality of schooling available in a location. It is expected that higher literacy in the area of origin will spur migration to the extent that it measures labor force quality, given that migrants with more education are better able to compete in destination labor markets. To the extent that literacy indicates the quality of schooling available, increased literacy might also slow outmigration. Similarly, the effect of literacy levels in the area of destination on migration flows is also uncertain.

When such a standard migration equation is estimated, it produces the expected results. Economic determinants are partially responsible for shaping migration flows, but politically motivated violence also matters. In particular, violence in regions of origin stimulates emigration, while violence in destination areas inhibits migration flows.[25]

Thus the simplest question has been answered: violence indeed shapes migration flows. This research note, however, seeks to test a narrower and more subtle hypothesis. We believe that violence becomes a significant determinant of migration flows only when some critical level of violence is reached. That is to say, a qualitative and quantitative difference exists between the effects of low- and high-intensity violence. In our view, at low levels of violence, a standard economic migration model—without violence variables—explains migration adequately. At high levels, violence itself begins to play a major role in shaping migration flows.[26]

To test this hypothesis, source regions must be classified as either high or low in violence. Then separate migration models are estimated for source regions high and low in violence, and the effects of economic and violence variables in the two models are compared to identify any salient differences. The crucial issue that must be addressed to pursue this question is determination of what constitutes "high" and "low" violence. Our research strategy was simply to allow the data to tell us. The division of departments into categories of low and high violence was made using a

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threshold level of violence that minimizes the sum of squared errors of the regressions for the two subsamples.[27]

This approach to analyzing the effect of violence on migration flows posits that the relative importance of economic and noneconomic factors in the migration decision varies according to the level of violence. No false dichotomy is imposed. Economic factors are not completely ignored when violence escalates, but neither is the possible effect on migration of low-intensity violence. Rather, the importance of the two factors changes when conditions change.[28]

The empirical results are presented in table 1. Because the subsamples were determined by levels of violence in regions of origin, the expectation was that the variable of violence in the origin area would be a more important determinant of migration for the high-violence subsamples. Hence violence in the destination area is likely to be significant in both high- and low-violence subsamples.

The regression results support these contentions. Doubling the per capita incidence of violence in origin areas with high levels of violence causes approximately a 7 percent increase in emigration, while the same increase in low-violence areas has no effect on migration.[29] Not surprisingly, violence in destination areas dissuades in-migration from both low- and high-violence areas of origin. Doubling destination violence produces a 2 to 9 percent decrease in in-migration.

Economic variables were found to have their expected effects. Destination wages, as proxied by destination tax receipts, prove to be a potent determinant of migration: a doubling of destination wages will cause a 75 to 85 percent increase in migration to that destination. Destination unemployment displays a smaller but still significant effect: a doubling in the destination unemployment rate will reduce migration between 15 and

27. In other words, tentative threshold levels of violence are specified, and the sum of squared residuals (adding the sum of squared residuals from the two regressions) are computed. The threshold level that produces the lowest sum of squares is selected, and further grid-search is carried out in a smaller region surrounding this threshold level until no significant improvements of fit can be made. This account is a heuristic description of the econometric technique of switching regressions, with the switch being determined endogenously. The scaling of the violence variable expresses violence in a given department as a percentage of the maximum level of violence in any other department.

28. The use of switching regressions—rather than linear or nonlinear ordinary least squares (OLS)—was motivated by two considerations. First, an OLS regression tests only whether a relationship exists between violence and migration. Because numerous articles from the popular press have documented exoduses from communities and regions afflicted by violence, we wished to test a more refined hypothesis that had a reasonable chance of being rejected as well as being confirmed. Second, the switching-regression approach allowed us to test the plausible hypothesis that economic variables are more important in individuals' decisions when violence is low but that variables in violence become more important when the level of violence is high. OLS regressions would not allow us to test this hypothesis.

29. This is the case whether violence is measured by corpses found or by assassinations.

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TABLE 1 *Migration Equation Estimates for Guatemala, 1976–1981, Using Assassinations and Corpses Found as the Measure of Violence*

	Corpses Found		Assassinations	
	Low Violence[a]	High Violence[b]	Low Violence[c]	High Violence[d]
Constant	−1.709	−2.144[e]	−1.449[e]	−1.555
	(1.41)	(3.63)	(2.08)	(1.32)
Origin tax receipts	−0.0172	0.0027	−0.1031	−0.0260
	(0.20)	(0.04)	(1.43)	(0.32)
Destination tax receipts	0.1907[e]	0.7499[e]	0.8524[e]	0.2344[e]
	(4.27)	(11.74)	(13.75)	(5.45)
Origin literacy	−0.1401	−0.0518	−0.1929	0.1519
	(1.01)	(0.29)	(0.97)	(0.90)
Destination literacy	0.0952	0.1945[f]	0.0618	0.0456
	(1.20)	(1.81)	(0.58)	(0.58)
Distance	−0.1298[e]	−0.3547[e]	−0.3511[e]	−0.1214[e]
	(4.02)	(7.79)	(7.51)	(3.56)
Origin unemployment	−0.1018	−0.0255	0.0468	−0.1148
	(0.46)	(0.46)	(0.92)	(0.43)
Destination unemployment	−0.0066	−0.1584[e]	−0.2784[e]	−0.0546
	(0.16)	(2.63)	(4.97)	(1.44)
Origin corpses found	−0.0001	0.0757[e]		
	(0.01)	(3.08)		
Destination corpses found	−0.0402[e]	−0.0879[e]		
	(3.46)	(5.48)		
Origin assassinations	0.0081	0.0670[e]		
	(0.15)	(3.28)		
Destination assassinations	−0.0234[e]	−0.0385[e]		
	(2.52)	(2.99)		

Note: T-statistics are given in parentheses.
[a]R^2 = 0.45; SSE = .0013; n = 105.
[b]R^2 = 0.55; SSE = .0035; n = 357.
[c]R^2 = 0.53; SSE = .0036; n = 357.
[d]R^2 = 0.42; SSE =.0013; n = 105.
[e]Significant at the 5 percent level.
[f]Significant at the 10 percent level.

28 percent. Migrants are less likely to move to areas of high literacy, presumably because it indicates strong competition in local labor markets. Finally, distance was found to have the expected effect: migrants are much more likely to move to a nearby state than to a distant one.[30]

What can be concluded from this analysis? First and foremost, the

30. The remaining variables—origin tax receipts, origin literacy, and origin unemployment—are not statistically significant. It is very common in migration models for origin variables to be less significant than destination variables. On this subject, see Yap (1977).

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simple interstate migration model presented above does a respectable job of explaining internal migration in Guatemala. The regression equations explain between 42 and 55 percent of the variance in migration probabilities. Second, even in areas of high violence, the economic determinants of migration remain strong. For example, if both source violence and destination wages were to double, the wage increase would account for ten times as many emigrants as the increase in violence at home. This finding does not imply that violence in source areas does not cause individuals to emigrate or that violence in potential destination areas does not dissuade individuals from migrating. In fact, violence does both. Purely economic influences on migration, however, seem more powerful. Finally and significantly, the empirical results reported above suggest that minimal-intensity violence in source regions may have little impact on migration. For source violence to encourage emigration, it must reach some critical level. In our analysis, this critical level was achieved when violence reached between 6 and 10 percent of the level found in the most violent department, a rather low threshold.

CONCLUSIONS

This research note has presented a new framework for analyzing postrevolutionary Guatemalan violence along with a brief history of this phenomenon. Our analysis thus serves as the context for a new economic model of migration that incorporates politically motivated violence. Using this model and recent data from Guatemala, we found violence to be an important determinant of migration flows during the late 1970s and early 1980s, the most violent period in Guatemalan history. It is interesting to note that violence was found to be significant only above a certain critical level; minimal-level violence appeared to have no significant effect on migration. The critical level for violence to start affecting migration decisions is not very high, however. This finding may reflect in part the nature of violence during the period covered by the empirical analysis. As the Guatemalan government strategy shifted to a policy of generalized terror, few individuals remained immune to the risk of violence. Thus a relatively small increase in violence in a department or region meant that almost everyone faced a higher risk of becoming a victim, and migration resulted.

The conclusion that violence shapes migration flows is an important one, but data constraints require that our results be interpreted carefully. These limitations affect data on both migration and violence. Migration data, for example, come from the 1981 national census. Refugees fleeing violence may often escape not only violence but also enumeration in the census. To the extent that refugees have not been counted as migrants, our results understate the effect of violence on migration. Con-

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straints on the violence variable are also important. The violence variable captures the cumulative effects of violence during an earlier period (see note 23) and thus misses the spontaneous migration caused by rural massacres like the incident at Panzós. This limitation too will cause understating of the effect of violence. In sum, both data constraints suggest that we have underestimated the true effect of violence on internal migration. If these biases could be corrected, reevaluation of the relative importance of "standard" economic factors and violence might be necessary.

But the fact that violence is a statistically significant determinant of migration flows even in the presence of factors that tend to understate its impact is a finding with an important implication for studying migration in Latin America and elsewhere: purely economic models of migration are inappropriate for conflict-ridden societies. In econometric terms, estimation based on a purely economic model will suffer from omitted variable bias. This outcome will cause the effects of the economic variables to be measured inaccurately, and such a model will consequently produce misleading policy prescriptions. In particular, the abilities of regional development schemes, minimum-wage policies, and other policy interventions to modify migration flows are likely to be overstated. Such a tendency is especially significant given the stated desire of many Latin American countries to slow the pace of growth in major urban centers (see UN 1990). The moral is clear: for development strategies to succeed, the definition of development must be broadened to include political as well as economic outcomes.

BIBLIOGRAPHY

AGUILERA PERALTA, GABRIEL
    1983   "The Massacre at Panzós and Capitalist Development in Guatemala." In *Revolution in Central America*, edited by the Stanford Central America Action Network, 307–14. Boulder, Colo.: Westview.
AGUILERA PERALTA, GABRIEL, JORGE ROMERO IMERY ET AL.
    1981   *Dialéctica del terror en Guatemala*. Costa Rica: Editorial Universitaria Centroamericana.
ALBIZUREZ, MIGUEL ANGEL
    1980   "Struggles and Experiences of the Guatemalan Trade Union Movement." *Latin American Perspectives* 7, no. 2 (Spring–Summer):145–59.
AMERICAS WATCH
    1990   *Getting Away with Murder.* New York: Human Rights Watch.
ARMSTRONG, ROBERT, AND JANET SHENK
    1982   *El Salvador: The Face of Revolution.* Boston, Mass.: South End.
ARNSON, CYNTHIA
    1982   *El Salvador: A Revolution Confronts the U.S.* Washington, D.C.: Institute for Policy Studies.
BALOYRA, ENRIQUE
    1982   *El Salvador in Transition.* Chapel Hill: University of North Carolina Press.
BERRYMAN, PHILLIP
    1984   *The Religious Roots of Rebellion.* Maryknoll, N.Y.: Orbis.

128

BLACK, GEORGE
   1981   *Triumph of the People: The Sandinista Revolution in Guatemala.* London: Zed.
   1984   *Garrison Guatemala.* New York: Monthly Review Press.
BLOMQUIST, A. G.
   1978   "Urban Job Creation and Unemployment in LDCs: Todaro vs. Harris and Todaro." *Journal of Development Studies* 15, no. 2:147–64.
BURNS, E. BRADFORD
   1980   *The Poverty of Progress.* Berkeley and Los Angeles: University of California Press.
CARDOSO, FERNANDO HENRIQUE, AND ENZO FALETTO
   1979   *Dependency and Development in Latin America.* Berkeley and Los Angeles: University of California Press.
CARMACK, ROBERT, ED.
   1988   *Harvest of Violence: The Maya Indians and the Guatemala Crisis.* Norman: University of Oklahoma Press.
CHOMSKY, NOAM
   1986   *Turning the Tide: U.S. Intervention in Central America and the Struggle for Peace.* Boston, Mass.: South End.
COLE, WILLIAM, AND RICHARD SANDERS
   1985   "Internal Migration and Urban Employment in the Third World." *American Economic Review* 75, no. 3:481–94.
CONCERNED GUATEMALA SCHOLARS
   1985   *Dare to Struggle, Dare to Win.* Brooklyn, N.Y.: Concerned Guatemala Scholars.
CORDEN, W. M., AND R. FINDLAY
   1975   "Urban Unemployment, Intersectional Capital Mobility, and Development Policy." *Economica* 42, no. 165:59–78.
DJAJIC, SLOBODAN
   1985   "Human Capital, Minimum Wage, and Unemployment: A Harris-Todaro Model of a Developed Open Economy." *Economica* 52, no. 208:491–508.
DOS SANTOS, THEOTONIO
   1970   "The Structure of Dependence." *American Economic Review* 60, no. 2:231–36.
DUNKERLEY, JAMES
   1988   *Power in the Isthmus.* New York: Verso.
EISENSTADT, S. N.
   1978   *Revolution and the Transformation of Societies: A Comparative Study of Civilizations.* New York: Free Press.
EVANS, PETER B.
   1979   *Dependent Development: The Alliance of Multinational, State, and Local Capital in Brazil.* Princeton, N.J.: Princeton University Press.
FALLA, RICARDO
   1978   *Quiche Rebelde.* Guatemala: Editorial Universitaria.
FERNANDEZ FERNANDEZ, JOSE MANUEL
   1988   *El Comité de Unidad Campesina: orígen y desarollo.* Cuaderno 3. Guatemala City: Centro de Estudios Rurales Centroamericanos (CERCA).
FIELDS, GARY
   1979   "Place to Place Migration in Colombia." *Economic Development and Cultural Change* 30, no. 3:539–58.
FRANK, LUISA, AND PHILIP WHEATON
   1984   *Indian Guatemala: Path to Liberation.* Washington D.C.: EPICA Task Force.
FRIED, JONATHAN, MARVIN E. GETTLEMAN, DEBORAH T. LEVENSON, AND NANCY PECKENHAM, EDS.
   1983   *Guatemala in Rebellion: An Unfinished History.* New York: Grove.
GREENE, WILLIAM
   1990   *Econometric Analysis.* New York: Macmillan.
GURR, TED ROBERT
   1970   *Why Men Rebel.* Princeton, N.J.: Princeton University Press.
HAGOPIAN, MARK
   1974   *The Phenomenon of Revolution.* New York: Dodd, Mead.
HANDY, JIM
   1984   *Gift of the Devil.* Boston, Mass.: South End.

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HAMILTON, NORA, AND NORMA STOLZ CHINCHILLA
1991   "Central American Migration: A Framework for Analysis." *LARR* 26, no. 1:75–110.
HARRIS, JOHN, AND MICHAEL TODARO
1970   "Migration, Unemployment, and Development: A Two-Sector Analysis." *American Economic Review* 60, no. 1:126–42.
HERZOG, HENRY, RICHARD HOFLER, AND ALAN SCHLOTTMANN
1985   "Life on the Frontier: Migrant Information, Earnings, and Past Mobility." *Review of Economics and Statistics* 67, no. 3:373–82.
INGENE, CHARLES
1989   "Urban-Rural Migration: Effects of a Change in Agricultural Uncertainty upon Resource Allocation." Manuscript.
IWGIA (INTERNATIONAL WORK GROUP FOR INDIGENOUS AFFAIRS)
1978   *The Massacre at Panzós.* Document no. 33. Copenhagen: IGWIA.
KENNEDY CENTER FOR HUMAN RIGHTS
1993   *Persecution by Proxy; The Civil Patrols in Guatemala.* New York: Robert F. Kennedy Memorial Center for Human Rights.
LEVY, MILDRED, AND WALTER WADYCKI
1974   "Education and the Decision to Migrate: An Econometric Analysis of Migration in Venezuela." *Econometrica* 42, no. 2:377–88.
MACLEOD, MURDO, AND ROBERT WASSERSTROM, EDS.
1983   *Spaniards and Indians in Southeastern Mesoamerica: Essays in the History of Ethnic Relations.* Lincoln: University of Nebraska Press.
MCCLINTOCK, MICHAEL
1985   *The American Connection: State Terror and Popular Resistance.* 2 vols. London: Zed.
MCCREERY, DAVID
1983   *Development and the State in Reforma Guatemala.* Athens: Center for International Relations, Ohio University.
1990   "Hegemony and Repression in Rural Guatemala, 1871–1940." *Peasant Studies* 17, no. 3 (Spring):157–77.
MANZ, BEATRIZ
1988   *Refugees of a Hidden War.* Albany: State University of New York Press.
MAZUMDAR, DIPAK
1988   "Rural-Urban Migration in Developing Countries." In *Handbook of Regional and Urban Economics,* vol. 1. New York: Elsevier.
MELVILLE, THOMAS, AND MARJORIE MELVILLE
1971   *The Politics of Land Ownership.* New York: Free Press.
MENDIZABAL, ANA BEATRIZ
1978   "Estado y políticas de desarrollo agrario: la masacre campesina de Panzós." *Política y Sociedad* (Guatemala), no. 6, segunda época (July–Dec.):71–74.
MIGDAL, JOEL
1974   *Peasants, Politics, and Revolution: Pressures toward Political and Social Change in the Third World.* Princeton, N.J.: Princeton University Press.
MONTGOMERY, TOMMIE SUE
1982   *Revolution in El Salvador: Origins and Evolution.* Boulder, Colo.: Westview.
MOORE, BARRINGTON
1966   *Social Origins of Dictatorship and Democracy: Lord and Peasant in the Making of the Modern World.* Boston, Mass.: Beacon.
NATIONAL ACADEMY OF SCIENCES AND THE INSTITUTE OF MEDICINE
1992   *Scientists and Human Rights in Guatemala: Report of a Delegation.* Washington, D.C.: National Academy Press.
PAIGE, JEFFREY
1975   *Agrarian Revolution: Export Agriculture in the Underdeveloped World.* New York: Free Press.
PAINTER, JAMES
1987   *Guatemala: False Hope, False Freedom.* London: Latin American Bureau.
PINTO SORIA, JULIO
1981   *Estructura agraria y asentamiento en la Capitanía General de Guatemala.* Colección Monografía, vol. 13. Guatemala City: Editorial Universitaria.

RICHMOND, ANTHONY
    1988   "Sociological Theories of International Migration: The Case of Refugees." *Current Sociology* 36, no. 2:7–26.

SCHLESINGER, STEPHEN, AND STEPHEN KINZER
    1983   *Bitter Fruit.* Garden City, N.Y.: Anchor.

SCHULZ, DONALD
    1984   "Ten Theories in Search of Central American Reality." In *Revolution and Counter-Revolution in Central America,* edited by Donald Schulz and Douglas Graham, 27–35. Boulder, Colo.: Westview.

SCHULTZ, T. PAUL
    1971   "Rural-Urban Migration in Colombia." *Review of Economics and Statistics* 53, no. 2:157–63.
    1982   "Lifetime Migration within Educational Strata in Venezuela: Estimates of a Logistic Model." *Economic Development and Cultural Change* 30, no. 3:559–83.

SHAW, R. PAUL
    1974   "Land Tenure and the Rural Exodus in Latin America." *Economic Development and Cultural Change* 23, no. 1:123–32.

SHERMAN, WILLIAM
    1979   *Forced Native Labor in Sixteenth-Century Central America.* Lincoln: University of Nebraska Press.

SHUKLA, VIBHOOTI, AND ODED STARK
    1990   "Policy Comparisons with an Agglomeration Effects-Augmented Dual Economy Model." *Journal of Urban Economics* 27, no. 1:1–15.

SKOCPOL, THEDA
    1979   *States and Social Revolutions.* Cambridge: Cambridge University Press.

SMITH, CAROL
    1983   "Labor and International Capital in the Making of a Peripheral Social Formation: Economic Transformation of Guatemala, 1850–1980." Working Paper no. 138. Washington, D.C.: Wilson Center.

STANLEY, WILLIAM DEANE
    1987   "Economic Migrants or Refugees from Violence? A Time-Series Analysis of Salvadoran Migration to the United States." *LARR* 22, no. 1:132–54.

STARK, ODED
    1983   "A Note on Modelling Labour Migration in LDCs." *Journal of Development Studies* 19, no. 4:539–43.

SWETNAM, JOHN
    1989   "What Else Did Indians Have to Do with Their Time? Alternatives to Labor Migration in Prerevolutionary Guatemala." *Economic Development and Cultural Change* 38, no. 1 (Oct.):89–112.

TORRES RIVAS, EDELBERTO
    1985   "Notas para comprender la política centroamericana." In *Centroamérica: crisis política internacional,* edited by Centro de Capitación para el Desarrollo (CECADE) and Centro de Investigación y Docencia Económica (CIDE). Mexico City: Siglo Veintiuno.
    1987   *Centroamerica, la democracia posible.* San José, Costa Rica: EDUCA.

UNITED NATIONS
    1990   *World Population Trends and Policies: 1989 Monitoring Report.* New York: United Nations.

WILLIAMS, ROBERT
    1986   *Export Agriculture and the Crisis in Central America.* Chapel Hill: University of North Carolina Press.

WOLA (WASHINGTON OFFICE ON LATIN AMERICA)
    1989   *The Administration of Injustice: Military Accountability in Guatemala.* Washington, D.C.: WOLA.
    1993   *Habits of Repression: Military Accountability or Human Rights Abuse under the Serrano Government in Guatemala, 1991–1992.* Washington, D.C.: WOLA.

WORLD OF INFORMATION PUBLISHERS
    1979   *Latin America Annual Report.* World of Information Publishers.

131

WOODWARD, RALPH LEE, JR., ED.
1988   *Central America: Historical Perspectives on the Contemporary Crisis.* New York: Greenwood.

YAP, LORENE
1977   "The Attraction of Cities: A Review of the Migration Literature." *Journal of Development Economics* 4:239–64.

YATES, LAWRENCE
1988   "The United States Rural Insurgency." In WOODWARD 1988, 47–66.

ZAVARK, ALVAN O.
1967   *Principales patrones de migración interna en Guatemala, 1964.* Guatemala City: Seminario de Integración Social Guatemalteca, Ministerio de Educación.

ZIMMERMAN, EKKART
1983   *Political Violence, Crises, and Revolutions: Theories and Research.* Cambridge, Mass.: Schenkman.

ZOLBERG, ARISTIDE
1981   "International Migration in Political Perspective." In *Global Trends in Migration: Theory and Research on International Population Movements,* edited by Mary M. Kritz, Charles B. Keely, and Silvano M. Tomasi. Staten Island, N.Y.: Center for Migration Studies.

ZOLBERG, ARISTIDE, ASTRI SUHRKE, AND SERGIO AGUAYO
1989   *Escape from Violence: Conflict and the Refugee Crisis in the Developing World.* New York: Oxford University Press.