

THE DEMOGRAPHIC COMPONENT OF THE CRISIS IN TIMOR-LESTE

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This document is an early draft and should not be considered as a final version. The authors are non-native English speakers and they ask for your acceptance of any errors in grammar and syntax

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SUMMARY

This study has attempted to identify and examine possible demographic components in the civil conflict that Timor-Leste is currently experiencing. Using a theoretical framework that proposes that the position of societies in the process of demographic transition is related to vulnerability to conflict, three socio-demographic risk factors were analyzed:

1. A high proportion of teenagers and young adults in the population combined with little opportunities of employment other than in the predominant subsistence sector of the economy.
2. High in-migration rates to Dili, the capital city, and the consequent rapid urbanization that the city is experiencing.
3. The surfacing of a strong regional component in the conflict (eastern and western parts of the county) as a result of the presence in Dili of migrants of different origin.

These three factors were analyzed with data from the 2004 Census, which is, at present, the most complete and reliable source of demographic data.

The paper analyzes how the previously mentioned three demographic characteristics and processes have been important stress factors on the present conflict. It also explores how they have shaped some of the main characteristics of the conflict, in particular, the facts that the unrest is centered mainly in the capital city and that it has adopted the form of violent street gang fights representing eastern in-migrants on one side and westerners and Dili natives on the other.

The general conclusion of this study is that demographic issues do matter in the civil conflict that Timor-Leste is suffering and demographic data and analyses may make substantial contributions to policies, measures and strategies directed to a return the country to normality.

THE DEMOGRAPHIC COMPONENT OF THE CRISIS IN TIMOR-LESTE

1. Introduction

Racked first by a long and bloody independence struggle, and then by a pro-Indonesian extremely hostile response, a new crisis has taken place in youngest nation of the world. A major characteristic of the recent conflict is that it has adopted the form of a rivalry between the population of the Eastern and Western regions of the country¹.

Other relevant characteristics of the recent crisis are: It is non-ideological in the sense that the reason of the conflict is not between groups proposing different political, economic or social strategies; it is circumscribed almost exclusively to urban areas, and in particular to the capital city, Dili; and it has also adopted mainly the form of violent street clashes between eastern and western youth gangs that use mainly makeshift arms, and frequently includes houses burning and streets' blockades.

The problem is complex and it has many political, economic, social, and demographic determinants. The purpose of this paper is to examine three possible socio-demographic sources of the crisis: a) a high proportion of young adults combined with few opportunities for education and decent employment; b) high inward migration rates to Dili and its rapid urbanization; and c) the surfacing in Dili of a regional conflict as a result of the presence of migrants of different origin.

These three propositions are analyzed with data from the 2004 Census, which is, at present, the most complete and reliable source of demographic data.

The study starts with a brief history of the country and a general account of the more direct determinants of the recent conflict and its main characteristics. In the following section a theoretical framework for the demographic analysis of the present crisis is proposed. The next section presents a general economic and demographic profile of the country followed by sections where the three propositions mentioned above are examined and evaluated with available data. The paper ends with a summary and conclusions.

It is expected that this study could be useful to the government and international officials, as well as security personnel, to identify specific and tangible components of the present crisis and, at the same time, contribute to the discussion of immediate and-long term policies and measures to resolve the conflict. Several important issues regarding the

¹ Unofficially, Timor-Leste is divided into two large regions: East and West. This is a non administrative division and should not be confused with the official 5 administrative regions of the country. The Eastern region coincides with the administrative Region 1, which include 3 districts (Baucau, Lautem and Viqueque). The Western Region coincides with the administrative Regions 2 to 5 and comprises 10 districts, including the capita city Dili (Ainaro, Manatuto, Manufahi, Aileu, Dili, Ermera, Bobonaro, Covalima, Liquica and Oecussi). The unofficial classification will be used throughout this paper. It is also relevant to mention that the Western region of Timor-Leste should not be confused with West Timor, that corresponds to the western half of the island of Timor which is an Indonesian province (Nusa Tenggara Timur).

demographic components of the recent crisis in Timor-Leste have emerged in this initial study. Therefore, it is also expected that this paper will motivate new research in this area.

2. Timor-Leste tragic history

Timor-Leste is located in the eastern half of the Timor Island, which is the easternmost of the Lesser Sunda Islands in the Malay Archipelago. It lies 640 kilometers northwest of Darwin, Australia and it is surrounded by the Savu Sea, the Strait of Wetar and the Timor Sea. In the west, it has a border with the Indonesian West Timor or Nusa Tenggara Timur province. The territory of East-Timor also includes the enclave of Oecussi, within western Timor, and the islands of Ataúro and Jaco.

**Map 1
Timor-Leste**



Timor-Leste is one of the world's poorest countries. The main source of resources for the vast majority of households is agriculture. Rice and maize are the staple foods. Agricultural production is dominated by low-input/low-output subsistence farming system. The basic unit of production is the small family farm. It is estimated that 50 to 70% of rural households experience chronic food insecurity (WFP, 2006). There are three main types of subsistence agricultural communities. In the uplands, mainly in the rugged hills and mountains located in the center of the island, are the poorest groups, with extremely narrow opportunities for cash income. They are mainly corn growers, most of them living well under the poverty line (established at US\$0.55 per day, ETTA, ADB, WB and UNDP, 2001). In the uplands there is also a cash crop from coffee, but the proportion of families involved in this activity is comparatively limited (25% of rural households), yield is low and fluctuates from year to year due to climatic variations. In the wetlands, mainly valleys interspersed in the mountains and the coastal region are the rice growers, which are usually able to produce and sell some surplus. They also cultivate other produce, livestock and cash-garden crops. However, yields are low and food insecurity is also high. In the coastal parts there are fishing communities that also produce staple crops, fruits and vegetables.

Colonial involvement in the region started in 1515 with the arrival of the Portuguese. They established just a small military settlement in what is now the district of Oecussi. Two centuries later, in the 1700s, they began the exploitation of sandalwood and the colony was expanded eastward. By the end of the 19th century the Portuguese presence began to have a significant impact as in their other colonies. They disrupted all those components of the indigenous political, social and economic structures that were seen as a barrier to a systematic exploitation of the colony, although traditional power holders were responsible for exercising the orders of the colonial leaders (Taylor, 1999).

During World War II Japan invaded East-Timor attracted by its strategic position and the oil and gas in the region. When the Japanese landed, there was a small Australian force which was driven out of Dili. The mountainous interior became the scene of a guerrilla campaign waged by Allied forces and Timorese volunteers against the Japanese. Following the end of the war, Portuguese control was reinstated.

During the post-war period Portugal began to invest more in the colony which resulted in a modest economic growth. The colonial system continued to be based on elites whose power originated in their position in the colonial structure or in the indigenous kinship system (Taylor, 1999). Portuguese education became more accessible to the locals, although by the end of the colonial period only 5% of the population were literate (UNDP, 2002a).

The process of Portuguese decolonization began in 1974, after the change of government in Portugal. Due to political instability and the more difficult decolonization of Angola and Mozambique, Portugal abandoned Timor-Leste, which unilaterally declared its independence on November 28 1975. Nine days later, Indonesia invaded and occupied the new country conveniently before the independence declaration could be internationally recognized.

Indonesia alleged that the leading Timor-Leste party FRETILIN was communist and with the defeat of the Americans in Vietnam and fearing a communist domino effect in South East Asia the USA, along with Australia, did not oppose to the pro-Western Indonesian government's invasion, despite Portugal disagreement. Timor-Leste nominal status in the United Nations remained that of a *non-self-governing territory under Portuguese administration*. Indonesia declared Timor-Leste its 27th province in July 1976 as *Timor Timur*.

The Indonesian invasion started a new era of colonial rule. The new colonizers used a completely different approach to the Portuguese. To legitimate the invasion and to exercise power in the territory, the Indonesian government implemented an extensive program to develop the region. Roads, schools, health center and other infrastructure works were developed. At the same time they tried to make the economy less dependent on agriculture.

The great majority of Timor-Leste population opposed to the Indonesian invasion. A guerrilla force, the FALINTIL, fought an aggressive campaign against the occupation army. The Indonesian rule of Timor-Leste was often marked by extreme violence and brutality. In addition, subsistence agriculture, food, and medical supplies were deliberately obstructed, resulting in heavy excess mortality. It is estimated that at least 102,800 conflict-related deaths occurred from 1974 to 1999, approximately 18,600 killing and 84,200 *excess* deaths from hunger and illness (Silva and Ball, 2006).

Up to the early 1990s, information on the repression to the civilian population was only nominally reported in the Western press. In 1991, however, the broadcast of footage of the Santa Cruz massacre of protesters by the Indonesian army modified the international perception of the Indonesian occupation of Timor-Leste. The independence movement began to gain substantial support in most Western countries. Other events that also help the backing of an independent Timor-Leste among many governments, agencies and political parties was the arrest of Xanana Gusmão, leader of the resistance movement and the awarding of the Nobel Peace Prize to Jose Ramos Horta and Bishop Carlos Ximenes Belo.

The political changes in Indonesia in 1998, with the fall of Suharto, were crucial. The newly appointed Habibie government received great pressure to demonstrate its commitment to democratic reforms. The Indonesian government accepted to carry out a referendum to let the Timor-Leste population decide on independence. It was conducted on August 1999 and a decisive majority, 78%, voted for independence. The reaction from the pro-integration militia created and supported by the Indonesian army, and the army itself, was devastating. Most schools, clinics and health centers in the country were destroyed, large part of the energy and communication infrastructure was ruined and government documents and archives burned. It is estimated that 1000 to 2000 people were killed while a third of the population was forced into refugee camps (UNDP, 2002).

A multinational force of peacekeepers was sent to restore law and order and later on the United Nations Transitional Administration in Timor-Leste (UNTAET) was established. The UNTAET administration re-established public basic services, rehabilitated schools and health facilities and established peace and order in the country. In 20 May 2002 Timor-Leste was declared independent. However, the road ahead was full of obstacles.

The first unrest was in 2002 when the police enter into a high school to arrest two students suspected of being responsible for the death of another youngster in a street gang fight. The procedure was heavy handed and massive and violent protest followed the incident. The police station was attacked, and even the house of the Prime Minister was burned. It was a short outburst of violence mainly because of the presence of the United Nation peacekeeping mission. However, the worst was to come.

In March 2006, about half of Timor-Leste army (FDTL), 591 soldiers most of which come from the western part of the country, were dismissed because they deserted their barracks and went on strike. The claim of the rebel group, known later as the *peticionarios* (petitioners), was that they have been passed over for promotion and been unjustly charged of having carried out only an uncommitted resistance to the Indonesian occupation. During four days in late April, the *peticionarios* demonstrated in Dili. On April 28, Prime Minister Mari Alkatiri instructed the army to end the protest, which it did with astounding violence, with a result of at least five dead and several wounded².

In addition, longstanding frictions between army and police became worst, generating open rebellion. The rivalry security forces intensified when the head of the military police and 28 of his armed men joined rebel soldiers in the hills near Dili. The conflict escalated and on May 25, regular soldiers shot a police barrack in Dili for an hour or more, apparently as retribution for what appears to have been an accidental shoot from a police earlier in the day.

The rebels secured a position in the hills that surround Dili, refused the government demand to surrender, insisting on an investigation to their grievances and launched attacks against army patrols deployed in Tibar, 6 km from Dili. However, it also began the prevalent form of violence in this crisis. Reproducing the regional conflict within the army that appears to have initiated the conflict, street gangs began running battles over east-west rivalries in the Dili suburbs of Becora and Fatuahi. Soon, vicious mobs of youths rampaged to other places in the capital city armed with machetes, makeshift firearms, arrows and slingshots. They began looting shops and burning dozens of homes. Terrorized families, mainly migrants from the eastern region of Timor-Leste, took refuge in catholic churches, convents, camps near the airport, public buildings and closed squares. The internally displaced persons (IDP) camps began to appear.

With its own security forces fighting each other and street battles among groups of youths raged in Dili, the government of Timor-Leste requested an international intervention force to restore order and provide security to the helpless citizens that increasingly were taken refuge in the IDP camps everywhere in Dili.

Australia, New Zealand, Malaysia and Portugal agreed to send troops. The intervention force secured the Dili airport, occupied police barracks and the port. Two Australian navy

² The news items references in this report are primarily from UNOTIL (United Nations Office in Timor-Leste) daily news review, which provided a summary in English of major news stories from local and international sources. At present, the UNOTIL has been replaced by the UNMIT (United Nations Integrated Mission in Timor-Leste).

ships, helicopters, armored vehicles and a large number of army and police vehicles complete an international force that reached some 3,200 troops. The Timor-Leste Defence Forces and the police were temporarily dissolved.

In spite of the strong international presence, the violence continued. During the days that followed the arrival of international troops, the streets of Dili were still scattered with packs of youths that blocked roads with burning tires, attacked IDP camps, burned houses and engaged in vicious street fights. Army or police patrols rushed from one trouble point to another. Most disturbances took place in the streets and alleys where youngsters from the east of the country attacked their western counterparts and vice versa. Columns of smoke warned the soldiers, but when they arrived, the houses were ablaze.

After the arrival of the international forces, the internal political crisis also continued. The Prime Minister Mari Alkatiri began under increasing pressure to resign, blamed for bad government, for having sparked off the crisis and even accused of having armed a hit squad to eliminate his political opponents. The President of the Republic, Xanana Gusmao, a reputed and popular independence hero, the influential Catholic Church, the opposition parties and even members of his own party (FRETILIN) forced the Prime Minister to resign, what he did on June 26. Jose Ramos Horta, former Minister of Foreign Affairs, was appointed as his successor on July 8. Several members of the former Cabinet remained in their post. Slowly, under the conspicuous presence of the peacekeeping force, the country began slowly to function again.

A new United Nations mission was recently put into operation. It is the United Nations Integrated Mission in Timor-Leste (UNMIT) and its purpose is to help rebuild institutions, promote reconciliation and assist national elections scheduled for next year. The mission also includes a police force to provide additional security.

The crisis has not yet been solved. There are many political disagreements but the main problem is that, contrary to what was anticipated because of the strong foreign military and police presence, the street violence has continued mainly in the form of west and east gangs' fights, house burnings and frequent attacks on IDP camps. This violence occurs mainly in Dili, although some sporadic clashes have also taken place in other parts of the country. As indicated above, gangs are, on the one hand, Dili natives and also in-migrants from western districts of Timor-Leste; on the other hand, Eastern gangs are formed mainly by migrants (or children of migrants) to Dili that came from the three most eastern districts of the country (Baucau, Lautem and Viqueque). As suggested above, the underlying cause of the enmity between the groups from the two regions is the perceived passive role of westerners in resisting the Indonesian occupation and in many instances actively supporting Indonesian interests.

It is important to mention that during Indonesia's occupation, many young Timor-Lesteese joined martial arts societies or groups as a way to defend themselves in the resistance activities. Since independence some of these groups have shifted toward crime, extortion operations, protection, gambling and smuggling rackets. There are strong suspicions of some of these groups' connections with certain individuals with well-known political ambitions.

Long time after the battalions of international peacekeeping troops arrived in May to restore calm, ten of thousands of refugees are still living in the IDP camps in awful conditions but too terrified to return home or simply because their home was burned. It is estimated that about 150,000 people left their home and barely any have returned. Some 72,000 people in Dili are in IDP camps and about 80,000 in the districts outside the capital.

The problem is complex and there are many explanations of the present crisis. They go from foreign conspiracies to the adverse socio-economic situation and old ethnic enmities. For example, it is frequently mentioned that the crisis is the result of an Australian stratagem directed to install in East-Timor a friendly government willing to make a more favorable deal to Australia for the exploitation of the rich Timor-Leste gas and oil reserves located in the Greater Sunrise field in the Timor Sea. Other explanations emphasize the incapacity of the government to solve chronic problems of poverty and unemployment, especially among the youth. Furthermore, the poor organization of the Timorese army and police and the frailty of some state institutions are also blamed for the situation. Opposition political parties' desperation because of its political and electoral weaknesses has also been mentioned as a major cause of the violence. They are accused of hijacking the initial protests to discredit and destabilize the government and, latter on, of promoting the action of street gangs.

The purpose of this paper is not to discuss the determinant of the present crisis in East-Timor but to explore and analyze its demographic components. The idea is not to identify the *demographic causes* of the situation but to explore the possible demographic components of it, that may have deepened the conflict, made it worse, may have given it a specific form, or its presence may have determined some of its characteristics. As it is discussed in the next section, demographic patterns and processes do not lead inevitably to conflicts nor eliminate the risk of violent disputes.

3. The demographic components of political instability: Theoretical framework

The analysis of the relationship between demographic characteristics and civil conflicts is comparatively recent. In a comprehensive study about this issue Cincotta, Engelman and Anastasion (2003) present convincing evidence that countries in the early stages of the *demographic transition* are more vulnerable to civil conflicts than those near its end. Moreover, gradual movement through the transition is likely to reduce that vulnerability (see also Cincotta, 2004).

The demographic transition is the process whereby a country moves from high birth and death rates to low birth and death rates. Usually, the decline in mortality leads the decline in fertility, with resulting high rates of natural population growth in the intermediate periods. (Merrick, 1986; PRB, 2000; Weeks, 2005). By the end of the past century, hardly any country was at the beginning of the transition with a near balance between birth and death rates at high levels. At present, most less developed countries are at different stages in the course of the transition. Several have reduced their fertility and mortality levels substantially and are approaching to the end of the transition, although high past fertility rates still maintain high rates of population growth. Others are still at the initial stages with

rapidly declining mortality, especially at early ages, but yet experiencing high birth rates with the subsequent rapid and substantial population increase. In many developed countries, with the convergence of birth and death rates at very low level, the demographic transition has ended. During the post-transition period, population growth fluctuates around zero or even becomes negative (Rowland, 2003).

It is important to mention that what is proposed here is not that demographic processes by themselves increase or reduce the possibilities of conflict, civil unrest or insurrection. Nor does population changes avoid or produce violence. Civil conflict is a complex and multi-stage process, caused by the interaction of multiple determinants, and cannot be oversimplified to a demographic consequence. They are mainly the result of a state's structural and institutional vulnerabilities that have historical origins. However an important and underrated part of these vulnerabilities is related to a population's position and pace throughout the demographic transition (Cincotta, Engelman and Anastasion, 2003; see also Cincotta, 2004).

From the analysis of the previously cited authors, it is possible to identify three interrelated features of the demographic transition that may help to explain the demographic components of Timor-Leste current crisis: (a) a population with an age composition exceptionally young and, in particular, with a large proportion of teenagers and young adults, (b) rapid urbanization centered mainly in the capital, Dili, fueled not only by natural population growth but also by high in-migration rates; and (c) regional enmities that have exacerbated in Dili mainly a result of an overshoot of the city structural and economic carrying capacity.

Natural population growth, that is, the difference between births and deaths, by itself, cannot explain civil conflict. Obviously, this relationship does not imply a direct causality. Countries do not have insurrections or their state fails because the population expands at a rapid pace, but because of the consequences of this process. One of its consequences is, precisely, the first stress factor: a young population composition.

Populations at the early stages of the demographic transition comprise very young population structure as a result of high fertility rates and declining mortality. They usually exhibit what is called a *youth bulge*, which is a large proportion of young people. In many countries the predominance of young adults represents a social challenge and a political stress factor. This is the case in populations where decent employment opportunities are limited and large numbers of youngsters feel frustrated in their search for a better life or a reasonable standard of living. There is plenty of evidence that a high proportion of young adults combined with few opportunities for education and employment is associated with the outbreak of civil violence.

Too many young people with not enough to do are a dangerous cocktail. In a rapidly growing population larger groups of youths come to age each year, willing work and, especially men, are looking for respect from their male peers and elders. They are keen to achieve an identity, affirm their independence and impress young women. While unemployment rates tend to be high in less developed countries cities, unemployment among young adults is even higher.

There are several historical and contemporary studies that relate the high proportion of young adults in the population to a high incidence and severity of conflict in most regions of the world (see Cincotta, Engelman and Anastasion, 2003). For example, Moller (1967/68), in an historical study about political instability in several European states during the 19th and early 20th centuries concluded that those that tended to have more revolts, revolutions and civil unrest exhibited significantly large proportions of people in their late teens and twenties. Mesquida and Wiener (1999) studied conflicts in the Balkans and Central Asia during the latter half of the 20th century and found that the intensity of conflicts was higher in countries with youngest populations than in those with less youthful populations.

It is important to emphasize that demography is not fate. In many countries, and not only in the more developed nations, most young adults have been educated or technically trained, and the economy has been able to occupationally absorb them both because of economic expansion and a reasonable population growth. In these countries the *youth bulge* is an asset and provides a *demographic bonus* to economic growth instead of a *demographic tax* to social and political stability.

The second destabilizing factor is rapid urbanization. This is a process whereby the proportion of the population living in urban places increases. It is not just urban population growth but rather it consists of a change in the proportion of the urban population relative to the population as a whole.

In the now developed countries it is a process that historically has been closely associated to economic development. Cities are related to development because they are centers of economic efficiency (Mumford, 1968). Urbanization has also been directly related to demographic processes and in particular to the demographic transition. Population pressures resulting from declining mortality in rural areas accompanied by the application of labor-saving technologies, the intensification of agriculture, and the increasing economic opportunities offered by the cities has been historically linked to urbanization in the developed countries (Weeks, 2005).

Urbanization in the Third World countries has had a similar dynamics except that it has taken place with less economic development and, in many cases, with too little development and at a very rapid pace (see, for example, Goldscheider, 1984). At present, the vast majority of urban population growth is taking place in the less developed world (United Nations Population Division, 2002). One of the causes of this situation is the natural growth of the urban population but, in many cases, even more important is rural to urban migration. Fertility rate in urban areas is still high in many countries and it is a major responsible for the urban expansion. In many places, natural population growth accounts for more than half of the urban growth (United Nations Population Division, 2002). However, in most nations it is rural out-migration the main contributor of the expansion of cities. Rapid population growth in rural areas has overshot many areas' capacity to provide work and subsistence to numerous families, situation which is frequently worsened by land property concentration. The intensification of agriculture has also pushed substantial numbers rural residents toward a possible better life in the city.

One participant to the United Nations Conference on Human Settlements (Habitat II) held in Istanbul in 1996 described the situation in quite precise terms: *Poor countries cities are bursting at the stems, yet rural migrants are coming in faster than ever; a social environment meltdown is waiting to happen* (cited in Weeks, 2005, p.485). The opportunities that cities offer to rural in-migrants in less developed countries are meager. Most Third World cities have long since outgrown their infrastructure. Concepts such as urban marginality, informal housing (squatter settlements) informal employment, collapse of urban services, and unsustainable urban environments, are frequently used to describe and analyze the urban reality of developing countries. There is a concept that, although some authors consider it is controversial, is very useful to describe urbanization in the less developed countries. It is the concept of *overurbanization*. It is a situation in which a city houses more residents that its economy and infrastructure can sustain (Dogan and Kasarda, 1988).

Why, in spite of these problems, the flood of migrants to the cities continues? The reply lies in the interaction of a set of factors suggested above: the rapid and substantial natural population increase in rural areas, limited possibilities of progress for small landowner or subsistence farmers accompanied with the increasing utilization of modern labor-saving technologies in large farms, and the hope of migrants that his or her situation in the city will improve, even if it takes years (Todaro, 1976). And anyways, in spite of the problems that the in-migrant may find, the city may still be an improvement with respect to the situation in a context of subsistence farming (UNDP, 1997; Pumain, 2006).

Migration is highly selective. This means that some people are more prone to migrate than other. For example, in most cases, especially in rural areas, young people are more likely to move than middle-age or old people (Tobler, 1995). One particular stage of life disproportionately associated with migration is that of reaching maturity. This is the age at which the demand or desire for obtaining job start to come out. It is time to search for a better life.

As most migrants are young, the previously mentioned youth bulge in cities is more inflated than in the overall population. The age composition of the population in urban areas, especially in large cities appears to be an even bigger destabilizing factor. In addition, cities posses other demographically relevant destabilizing characteristics. Usually, because of in-migration, urban populations tend to be diverse, bringing different ethnic, religious and regional groups into close social contact. Frequently, these diverse populations engage in strong economic and political competition and this is when historic rivalries and cultural misunderstandings are likely to emerge (Cincotta, Engelman and Anastasion, 2003). Urban housing and job markets may become the main arenas of antagonism between communities.

Summarizing, the main hypothesis to be examined in this paper is that the form that the civil unrest in Timor-Leste has taken has been shaped by three socio-demographic processes strongly linked to the place of the country in the demographic transition course. These three destabilizing factors are: a population with a young age composition, rapid and

substantial urbanization, and intensification of regional hostilities as a result of *overurbanization* in the capital, Dili³.

Regardless of the determinants and its political or economic components, the civil conflict that Timor-Leste is experiencing has two major distinctive aspects: (a) the conflict's physical clashes consist predominantly on street *battles* between youth gangs that use mainly makeshift arms, and frequently includes also houses burning, blockades in streets, and attacks to IDP camps; and (b) the two belligerent groups are differentiated by their regional origin and the underlying cause of their fighting are east-west rivalries. What it is proposed here is that some demographic processes are major responsible for these two main characteristic that the Timor-Leste civil conflict has adopted.

For further analyses, it is important to mention some characteristics that the Timor-Leste civil unrest do not have:

- At present, the ongoing street fighting is not between two factions of the regular armed forces, although it began as such;
- Clashes in places other than Dili are only occasional, at least until now. They take place mainly in urban areas, mainly in the district capitals, and have similar characteristics to the fights in Dili;
- Aggressions against the peacekeeping international force are infrequent, at least by now, and consist mainly in stone throwing;
- Classical ideological conflicts (right vs. left, communism vs. capitalism or liberalism vs. conservatism) are apparently absent from the struggle;
- Whether or not main political actors are behind the violence remains unclear, as do the reasons they might have for manipulating street groups and encouraging the fighting (although several hypotheses exist).

4. The economic and demographic background

Per capita GDP in Timor-Leste was only US\$ 389 in 2003, one of the lowest in the world. It ranks in place 140 among the 177 countries considered in the UNDP Human Development Report of 2005 (UNDP, 2005). Its human development index was 0.513, which is almost the same of Sudan, Congo and Togo. Although, the country has made considerable progress in rebuilding its economy during the past five years, much progress is still necessary.

³ It is relevant to point out that *overurbanization* is not an attribute of large cities or synonymous of *metropolization*. It is a process that may take place in comparatively small cities, such as Dili, which even still has several rural characteristics. As explained earlier, it occurs when a city cannot longer accommodate residentially or occupationally its population in a tolerable and acceptable form.

The economic structure of Timor-Leste is characterized by a predominantly non monetary subsistence agriculture and fishing sector based on small family productive units. Consequently, employment in this sector is the most frequent form of insertion in the labor market. The 2004 Census shows that 70.9% of the labor force is engaged in subsistence activities and only 10.9% in what it can be consider a *formal* or *modern* sector (government, industry, construction, commerce, services, international agencies, NGOs). Table 1 shows the employment composition of Timor-Leste labor force. Notice that unemployment is high. The census identified two types of unemployed persons. The first type includes individuals who, in the week previous to the census did not work but were looking for a job. They are only 1.6% of the labor force. The other type comprises the so-called *discouraged workers*, which are persons that are willing to work but are not actively searching for a job anymore. They represent 23.2% of the labor force and 4.5% of the total population 15 years and older. The own-account workers category seems to comprise a very heterogeneous group, which includes from owners of established and formal shops and stores to street vendors.

Table 1
Timor-Leste: Economically active population by
sex according to type of labor insertion, 2004

Type of labor insertion	Total	Male	Female
Formal or modern sector	10.9	13.1	7.8
Own-account	9.7	8.1	11.9
Subsistence sector	70.9	69.0	73.5
Unemployed	1.6	1.9	1.1
Discouraged	6.9	7.8	5.6
Total	100.0	100.0	100.0
N	337,696	195,991	141,705

Unless otherwise stated, the 2004 Census of Population and Housing is the source of all the tables presented in this paper

It is important to emphasize the traditional or pre-capitalist character of the economic structures and, in particular, of the labor market in Timor-Leste. In general, unemployment is virtually absent in subsistence economies, especially when they entail modest monetary exchanges and little division of labor. Unemployment emerges, with the development of a modern economy with predominantly monetary commercial operations, labor relations based on contracts or formal arrangements, production diversification, and an increasing demand for a more qualified labor force (see, for example, Todaro, 1992). During the Indonesian occupation, Timor-Leste was a backward and politically instable province. However, as indicated previously, as a result of the development policies implemented by the Indonesian government, a modern economic sector began to emerge, especially in Dili, although it never becomes economically significant (Taylor, 1999). After independence, it appears to have somewhat expanded, although it is very far from playing the role that it has had in other countries in terms of initiating a process of structural transformation in other sectors or areas of the economy. Moreover, in Timor-Leste, it is clear that the formal or modern sector is not being able to absorb all the workers that the labor force is supplying and, on the other hand, a substantial part of the unemployed labor force do not want to supply their labor to the subsistence sector, which is likely to occupationally absorb them. In other words, the subsistence sector is not able, or it is not being perceived, as a *safety net* for the unemployed. This fact is likely to have important social consequences mainly because it suggests the existence of expectations that cannot be satisfied by employment in the subsistence sector. The result is frustration, dissatisfaction and resentment. This point is examined with more detail in another section.

Social indicators in Timor-Leste are not better than economic ones. Table 2 shows selected indicators of socioeconomic development. The table is self-explanatory; most variables reveal a low degree of development, low education, poor health status, poor sanitation, poverty and vulnerability.

Table 2
Timor-Leste: Selected socioeconomic indicators

Percentage illiteracy among the population 15-24, 2004 *	27
Male	26
Female	29
Net enrolment ration in primary education, 2001 (%)**	73
Percentage of pupils starting grade 1 who reach grade 5, 2001**	47
Percentage of the population 18 years and older with a High School diploma (2004)*	15
Male	19
Female	12
Percentage of the population 25 years and older with a university degree (2004)*	2
Male	3
Female	1
Infant mortality rate, 2002 (deaths under 1 year of age by 1,000 births)*	98
Under-5 mortality rate, 2002 (deaths under 5 years of age by 1000 population under 5 years of age)*	129
Life expectancy at birth, male, 2002 (years)*	57
Life expectancy at births, female, 2002 (years)*	59
Percentage of the population bellow 1 US\$ per day (2001)***	20
Percentage of underweight children under-5 years of age (2001)***	45
Percentage of people with access to safe water (2001)****	56
Urban	72
Rural	51
Percentage of people with access to sanitation (2001)****	19
Urban	44
Rural	10

Sources:

* National Statistical Directorate, *Census of Population and Housing 2004, Summary of Main Indicators*, Dili, 2005

** Republica Democrática de Timor Leste and United Nations Country Team, *Timor-Leste, Millennium Development Goals Report*, Dili, 2004

*** Household Living Standard Measurement Survey, 2001, National Statistics Directorate, Asian Development Bank, United Nations Development Programme and World Bank, Dili, Timor-Leste.

**** UNICEF, *Multiple Indicator Cluster Survey (MICS)*, Dili, 2003.

Table 3 shows the distribution of the population according to the two main regions and also by districts. Dili is located in the Western region, but for the purpose of this study, it was considered relevant to place it as an individual unit⁴.

⁴ As mentioned in footnote 1, Timor-Leste is divided into 5 administrative regions that should not be confused with the Eastern and Western regions used for this analysis.

Table 3
Distribution of the population by sex
according to region and districts, 2004

Regions and districts	Both sexes	Male	Female
N	918,458	466,963	451,495
Total	100.0	100.0	100.0
Dili	18.9	19.8	17.9
East	24.1	23.6	24.7
Baucau	10.9	10.8	11.0
Lautem	6.1	5.9	6.3
Viqueque	7.1	6.9	7.3
West	57.0	56.6	57.4
Aileu	4.1	4.2	4.0
Ainaro	5.7	5.7	5.7
Bobonaro	9.0	8.9	9.2
Covalima	5.8	5.7	5.8
Ermera	11.2	11.2	11.3
Liquica	6.0	6.0	6.0
Manufahi	4.9	4.9	4.9
Manatuto	4.0	4.0	4.0
Oecussi	6.3	6.1	6.4

5. Fertility, population growth, age structure and the predominance of a subsistence economy

The demographic profile of Timor-Leste is that of a country in the early stages of the demographic transition (see Table 4). It has the highest level of fertility in the world with a total fertility rate of 7.0 children per woman. Mortality rates are also high, but they have declined substantially and are much lower than typical pre-transitional rates. As a result the annual rate of population growth is extremely high, actually one of the highest in the world (3.2%). One of the results of these trends is an extremely young population. Notice that the median age is only 18.2 years.

Table 4
Timor-Leste and Dili: Selected demographic indicators

Indicators	Timor- Leste	Dili
Natural population growth (2004)	3.2	3.4
Median age (2004)	18.2	19.5
Birth rate (2004)	45.5	40.1
Death rate (2004)	13.5	6.1
Annual in-migration rate (1999-2004)	-	165.3
Annual out-migration rate (1999-2004)	-	15.8
Annual net migration rate (1999-2004)	-	149.5
Total fertility rate (2003)	7.0	5.2
Under-five mortality (2002)	129	80
Life expectancy at birth (2002)	58.1	64.1

Table 4 also shows the demographic profile of Dili, the capital city. Fertility rate is lower than the national average, but since mortality is also lower, the annual rate of natural increase is slightly higher than the national average. Notice that internal migration is substantial. The in-migration rate is quite high: 165 in-migrants per 1,000 Dili residents (in 1999) arrived from year 1999 to 2004. Given that out-migration rate is comparatively low, net migration rate (the net population gains because of migration) is high and, as a result, total annual rate of population growth surpassed 10% during recent years.

Table 5 shows the relative population distribution by age and sex in Timor-Leste and Dili. The percentages reveal a very young population structure. The age composition is clearer in Figure 1 where the population pyramid of Dili was superimposed to the pyramid corresponding to the entire population of the country. The two graphs reveal young populations but that in Dili has a remarkable prominence in the age groups 15-19 to 30-34. This is precisely the *youth bulge* mentioned in the theoretical framework. For example, the population 15 to 34 in the whole population is 31.3% and in Dili it is 42.4%. The reason, as it is confirmed in the next section (Table 7), is inward migration of teenagers and young adults.

Table 5
Timor-Leste and Dili: Population distribution by sex according to
age groups, 2004

Age groups	Timor-Leste			Dili		
	Total	Male	Female	Total	Male	Female
0-4	16.4	16.6	16.2	15.9	15.5	16.4
5-9	14.1	14.3	13.9	11.8	11.5	12.1
10-14	12.9	13.1	12.6	10.9	10.7	11.2
15-19	10.3	10.2	10.4	12.6	12.2	13.1
20-24	8.1	7.9	8.4	13.1	13.4	12.8
25-29	6.2	6.0	6.3	9.0	9.5	8.4
30-34	6.7	6.8	6.7	7.7	8.3	7.1
35-39	5.3	5.3	5.3	5.3	5.6	5.0
40-44	5.0	4.8	5.2	4.1	4.3	4.0
45-49	3.7	3.6	3.8	2.9	2.9	2.9
50-54	3.6	3.5	3.6	2.3	2.3	2.3
55-59	2.1	2.1	2.1	1.2	1.2	1.2
60-64	2.2	2.3	2.2	1.2	1.2	1.3
65-69	1.3	1.3	1.3	0.7	0.6	0.9
70-74	1.1	1.1	1.1	0.5	0.5	0.6
75 +	1.2	1.2	1.1	0.6	0.6	0.7
Total	100.0	100.0	100.0	100.0	100.0	100.0
N	918,458	466,963	451,495	173,541	92,542	80,999

Figure 1: Pyramids for Timor-Leste and Dili (shaded), 2004

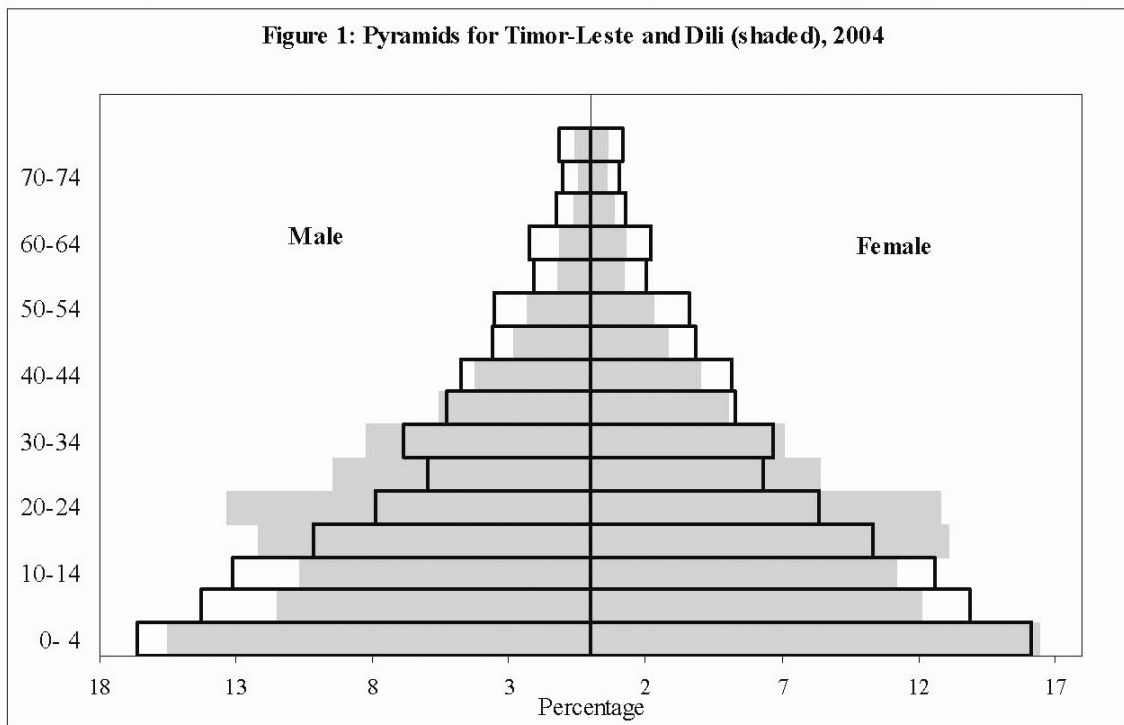


Table 6 shows other conventional indicators of the sex-age composition for the whole country and Dili. Both the national and the capital populations are young but the latter is somewhat older because of the excess of young adults as compared with children and young teenagers. It is also important to notice the high sex ration in Dili (114 men per 100 women). As it will be shown in the following section, this is the result of migration selectivity; urban-ward migration is dominated more by men than by women. Female inward migration rates to Dili are not low. The *youth bulge* among the Dili's women population is also evident (see Figure 1), but male rates are undoubtedly higher. It is also relevant to mention the large percentage of women in reproductive ages in Dili. This data indicates an enormous potential for the natural population growth of the population of the capital city. In fact, Dili's population pyramid exhibits a bimodal profile, indicating a large number of young children and a large number of young adults.

Table 6
Timor-Leste and Dili: Selected indicators of sex and age composition, 2004

Variable	Timor-Leste	Dili
Sex ratio	103.4	114.3
Median age	18.2	19.5
Percentage of the population:		
Under 5 years of age	16.4	15.9
Under 15 years of age	43.4	38.7
15 to 64 years old	53.2	59.5
Over 65 years of age	3.5	1.8
15-34 years old	31.3	42.4
Percentage of women in reproductive age (15-49)	44.6	56.0
Dependency ratios		
Young	88.1	68.1
Old	81.6	65.0
	6.6	3.1

As suggested before, a population with a large number of young adults could offer a *demographic bonus* to economic growth, especially if the economic structures and the process of development itself create a demand for a qualified labor force and there is a generation of well educated young adults (on success stories in this regard, see Mason, 2003; Williamson and Higgins, 1997). Table 7 clearly indicates that this is not the case in Timor-Leste.

Table 7
Timor-Leste and Dili: Economically active population by age groups according to sex and type of labor force insertion, 2004

Type of labor insertion	Timor-Leste							Dili								
	Age group							Age group								
	15-19	20-24	25-29	30-34	35-39	40-64	65+	Total	15-19	20-24	25-29	30-34	35-39	40-64	65+	Total
Both sexes																
Formal or modern sector	3.4	10.0	17.3	16.6	15.8	7.9	1.9	10.9	7.1	19.6	33.6	35.1	33.2	22.9	4.8	26.3
Own-account	7.3	10.4	11.9	11.5	11.0	8.6	4.8	9.7	13.8	14.1	16.1	16.7	18.0	17.9	11.8	16.5
Subsistence sector	64.6	63.0	61.2	65.5	68.2	79.3	85.0	70.9	21.6	26.8	25.3	27.6	29.5	38.0	50.0	30.3
Unemployed or discouraged	24.7	16.6	9.6	6.4	5.0	4.2	8.3	8.5	57.5	39.5	25.0	20.6	19.2	21.2	33.4	26.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0
N	24,215	41,537	42,039	49,579	39,592	123,785	16,949	337,696	3,474	9,352	10,247	10,197	7,269	15,826	1,373	57,738
Male																
Formal or modern sector	2.6	10.4	20.3	20.4	20.1	9.7	1.6	13.1	8.0	22.1	38.6	41.8	40.1	28.1	6.5	31.7
Own-account	5.8	8.8	10.6	9.8	9.4	6.8	3.9	8.1	15.5	16.5	18.6	18.8	18.9	18.9	13.5	18.2
Subsistence sector	65.1	60.3	56.8	61.8	64.1	78.4	88.4	69.0	12.3	11.9	10.7	13.2	16.5	25.4	39.7	16.8
Unemployed or discouraged	26.5	20.5	12.3	8.0	6.4	5.1	6.1	9.8	64.2	49.5	32.1	26.2	24.5	27.6	40.3	33.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
N	12,434	22,192	24,448	30,412	23,981	71,997	10,527	195,991	1,907	5,390	6,427	6,720	4,749	9,812	756	35,761
Female																
Formal or modern sector	4.1	9.6	13.0	10.7	9.2	5.5	2.3	7.8	6.1	16.2	25.2	22.1	20.4	14.6	2.8	17.6
Own-account	8.8	12.3	13.6	14.2	13.5	11.2	6.3	11.9	11.7	10.8	12.0	12.7	16.4	16.3	9.7	13.5
Subsistence sector	64.4	66.0	67.5	71.2	74.4	80.2	79.7	73.5	32.9	47.2	49.9	55.5	54.0	58.5	62.5	52.3
Unemployed or discouraged	22.7	12.1	5.9	3.9	2.9	3.1	11.7	6.8	49.3	25.8	12.9	9.7	9.2	10.6	25.0	16.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
N	11,781	19,345	17,591	19,167	15,611	51,788	6,422	141,705	1,567	3,962	3,820	3,477	2,520	6,014	617	21,977

As shown earlier in Table 1, the majority of labor force in Timor-Leste is in the subsistence sector and only a minority is in the modern or formal sector. Table 7 compare the type of labor force insertion at the national level with that observed in Dili. The percentage of the labor force in the subsistence sector in Dili is much lower than the national average (30.3% against 70.9%), but it is still definitely high. The percentage in the modern or formal sector is higher in Dili than in the country as a whole (23.6% against 10.9%), however it is not as high as one may expect in the country's capital city. A more important piece of information is the percentage of the labor force unemployed and classified as discouraged workers: 26.9% in Dili against a national average of 8.5%. Notice that exactly one-third of Dili's male labor force is unemployed or discouraged. This proportion is lower among females, but the proportion of women engaged in informal activities is much higher.

The examination of the type of insertion by age groups clearly reveals the demographic and economic vulnerability of Dili to social turbulence. According to Table 7, the percentage of the labor force who is openly unemployed or discouraged reach more than 60% among male teenagers and almost 50% among males in the age group 20-24. The percentages of these two groups in the modern or formal sector are quite low. The percentage unemployed are less dramatic in the other age groups but still quite high. For example, almost one-third of the male labor force 25 to 29 years old is unemployed or discouraged and more than one-fourth in the age group 30-34 is in such situation.

The combination of the youth bulge that characterizes the age composition of Dili's population and a labor market with predominantly pre-capitalist, pre-industrial, or traditional features are stress factors that are likely to explain the form that the conflict in Timor-Leste has adopted. Essentially, as described earlier, it is a conflict that consists mainly of frequent fights between large gangs of youths that behave extremely violently against each other and against sectors of the population that they perceive as adversaries. The degree of organization of these gangs may perhaps vary but they have not taken up the military structure of guerrilla groups, revolutionary cells and much less the form of an irregular army. They do not use heavy armaments or not even modern arms. Machetes, makeshift firearms, arrows and slingshots are the usual weaponry. Terrorist act with explosives are unknown until now.

The political intricacies of the conflict are complex and, as mentioned previously, the actors that are organizing, controlling and manipulating youth gangs are anonymous and the real reasons for the fighting are unclear. However, the conflict might have adopted another form if a different age composition and a more dynamic labor market would exist in Timor-Leste. Although it was proposed earlier that socio-demographic processes are not causes or direct determinants of civil conflicts, but only factors that might modulate them, one may ask to what extent in Timor-Leste this explosive combination of a large youth bulge and a stagnant and traditional labor market are really a major origin of the conflict.

Contrary to other places in the country, the subsistence sector in Dili probably has a limited power of labor absorption, although it shows certain capacity to provide employment to an

important proportion of females, middle age and old people (see Table 7)⁵. However, the subsistence sector does not appear to satisfy the expectations of young males, who are probably more receptive to internalize consumption patterns that can be satisfied only by an occupational insertion in the cash-predominant formal or modern sector. The individual response to lack of opportunities is likely to be frustration and rage, and the respective response as a social group is a strong propensity to get involved in any struggle as an immediate escape to frustrations or to perceive the fight as a vague social or political solution to problems.

6. Migration and urbanization

As indicated in the previous section, migration has been the main responsible of both the population growth of Dili and the *youth bulge* that characterize the age composition of its population. As suggested earlier, the capital city seems to be the only place able to provide possibilities of an occupational insertion in the formal monetary sector.

Table 8 shows information of inward migration to Dili. In the first panel of the table, lifetime migration is presented. This information comes from the direct census questions on the place of birth and place of current residence. An individual living in Dili but born in another district is considered as a life time in-migrant (internal migrant) and an individual born in another country is considered as an immigrant (international migrant). This data do not provide information on when persons migrated or regarding residence in places other than the location of birth and present residence. Therefore, persons classified as non migrants may have lived in other district between their birth and the date of the census.

Although data on place of birth and place of residence is not useful to analyze complex migration patterns, it provides satisfactory information on the geographical origin of the population of a given area.

⁵ Notice that, in spite of being a medium size city, Dili has many rural characteristics which permits that 39.1% of the labor force be engaged in agriculture, mainly of the subsistence type. This percentage is 22.2% among males but increases to 62.0% among women.

Table 8
Inward migration to Dili, lifetime, 1999-2004 and 2002-2004

Age	Lifetime immigration and immigration			Immigration and immigration period 1999-2004			Immigration and immigration period 2002-2004										
	Non Migrants	Lifetime in-migrants	Unknown	Total	N	Non Migrants	1999-2004 in-migrants	Unknown	Total	N	Non Migrants	2002-2004 in-migrants	Unknown	Total	N		
Both sexes																	
-15	80.9	1.7	15.1	2.3	100.0	67,095	74.4	6.6	13.8	5.2	100.0	35,337	5.0	24.0	100.0	50,180	
15-19	53.6	1.1	42.0	3.3	100.0	21,919	60.5	5.5	28.2	5.8	100.0	21,919	2.5	13.9	4.3	100.0	21,919
20-24	38.8	3.0	54.3	3.9	100.0	22,757	58.2	6.3	31.6	5.8	100.0	22,757	2.9	14.6	4.1	100.0	22,757
25-29	27.8	6.5	60.9	4.8	100.0	15,555	60.7	9.7	23.7	5.9	100.0	15,555	4.5	10.8	3.9	100.0	15,555
30-34	28.8	6.3	60.2	4.8	100.0	13,397	67.4	10.7	16.8	5.2	100.0	13,397	5.0	7.6	3.4	100.0	13,397
35-39	31.8	6.4	57.1	4.7	100.0	9,216	71.4	10.6	13.7	4.3	100.0	9,216	5.3	6.1	3.1	100.0	9,216
40-64	32.4	4.7	58.3	4.6	100.0	20,392	76.2	8.8	10.9	4.0	100.0	20,392	4.3	5.7	3.2	100.0	20,392
65+	38.5	1.4	55.3	4.8	100.0	3,210	78.6	5.0	10.6	4.9	100.0	3,210	3.0	5.4	4.1	100.0	3,210
Total	54.0	3.2	39.3	3.5	100.0	173,541	67.3	7.7	19.8	5.2	100.0	141,783	3.3	8.6	10.2	100.0	156,626
Male																	
-15	80.6	1.7	15.3	2.3	100.0	34,882	74.1	6.4	14.2	5.3	100.0	18,400	2.1	5.1	23.9	100.0	26,076
15-19	53.4	1.1	42.2	3.2	100.0	11,290	60.9	5.3	27.9	5.9	100.0	11,290	2.4	13.7	4.3	100.0	11,290
20-24	37.8	2.3	56.1	3.9	100.0	12,355	55.3	5.5	33.1	6.1	100.0	12,355	2.6	15.2	4.2	100.0	12,355
25-29	25.9	4.6	64.6	4.9	100.0	8,754	59.2	8.9	25.8	6.1	100.0	8,754	4.2	11.5	4.1	100.0	8,754
30-34	26.7	4.4	64.0	4.8	100.0	7,638	65.7	10.6	18.1	5.6	100.0	7,638	5.0	8.0	3.6	100.0	7,638
35-39	29.1	29.1	59.8	5.0	100.0	5,146	69.5	10.9	15.1	4.6	100.0	5,146	5.6	6.5	3.1	100.0	5,146
40-64	29.8	6.2	59.3	4.6	100.0	10,949	75.5	9.9	10.7	4.0	100.0	10,949	4.8	5.5	3.1	100.0	10,949
65+	36.9	2.4	56.6	4.1	100.0	1,528	77.6	6.9	10.8	4.8	100.0	1,528	3.9	5.4	4.2	100.0	1,528
Total	52.4	3.0	41.1	3.5	100.0	92,542	66.5	7.6	20.5	5.4	100.0	76,060	3.3	8.8	10.1	100.0	83,736
Female																	
-15	81.1	1.7	14.8	2.4	100	32,213	74.8	6.9	13.3	5.0	100.0	16,937	2.2	4.8	24.1	100.0	24,104
15-19	53.8	1.1	41.7	3.4	100	10,629	60.0	5.7	28.6	5.7	100.0	10,629	2.5	14.2	4.3	100.0	10,629
20-24	40.0	3.9	52.1	4.0	100	10,402	57.4	7.2	29.9	5.5	100.0	10,402	3.4	13.7	4.0	100.0	10,402
25-29	30.1	9.0	56.1	4.7	100	6,801	62.6	10.7	21.1	5.6	100.0	6,801	4.9	10.0	3.7	100.0	6,801
30-34	31.6	8.7	55.1	4.7	100	5,759	69.5	10.9	15.0	4.7	100.0	5,759	5.1	6.9	3.1	100.0	5,759
35-39	35.1	6.7	53.7	4.4	100	4,070	73.8	10.2	11.9	4.0	100.0	4,070	4.9	5.6	3.0	100.0	4,070
40-64	35.4	2.9	57.1	4.6	100	9,443	77.0	7.7	11.3	4.0	100.0	9,443	3.7	6.0	3.4	100.0	9,443
65+	39.9	0.6	54.2	5.4	100	1,682	79.6	5.1	10.3	4.9	100.0	1,682	2.3	5.4	4.0	100.0	1,682
Total	55.9	3.4	37.2	3.5	100	80,999	68.3	7.8	18.9	5.0	100.0	65,723	3.3	8.3	10.5	100.0	72,890

Notice that a little more than half of Dili's population is native of the city. However, almost 40% are internal migrants. The percentage of in-migrants 20 years and older is over 50% and it is more than 60% among those 25 to 34 years old. The percentage of lifetime in-migrants is higher among males than females, although the difference is not substantial. The age pattern is similar by sex, with the higher proportions in the ages 25 to 34 years. An important proportion of immigrants are Indonesian who decided to remain in the country after independence and also Chinese, which has been traditionally present in Timor-Leste in commercial activities. During the Indonesian occupation, many people from Timor-Leste went abroad as refugees and it is quite likely that many immigrants are also the children of those refugees who have returned.

The second panel shows recent inward migration to Dili in the form of residence at a fixed past date. In the 2004 census, fixed-period migration was measured by the question: *Where were you living in January 1999?* This question counts migrants over a definite past period of time associated with their current residence. These data also shows the substantial inward migration that Dili is experiencing. Almost 20% of the population in Dili is in-migrant and this percentage increases to more than 30% among those aged 20-24 years old. Although Dili seems to have been a center of attraction for migrants for a long time, most in-migration has taken place during the last few years as suggested when lifetime in-migration is compared to the more recent in-migration.

The third panel is similar to the second, but it shows the inward migration that took place from 2002 to 2004, that is, during the 2 years prior to the census. This panel of Table 8 also confirms the heavy in-migration experiencing by Dili and its mainly recent character.

The three panels of Table 8 clearly indicate that inward migration to Dili involves mainly teenagers and young adults. This is precisely the main determinant of the *youth bulge* in Dili's population (see Figure 1). As indicated previously, this demographic characteristic has destabilizing influences. A large proportion of young in-migrants have not fulfilled the economic expectations that they had when they moved in. As also shown earlier, unemployment affects mainly the young adult. In a society that is not providing them neither a satisfying present position nor real possibilities of individual or collective improvements, violent behavior is not surprising.

It is quite clear that migration has played a mayor in role in the growth that Dili is experiencing, especially during the present decade. Table 9 shows the decomposition of Dili's population growth from 1999 to 2004. In just 5 years the population grew from 100,715 to 173,541 persons, that is, 10.9% annually; 43.6% of that increase was cause by natural population growth and 56.4% by inward migration.

A city growing at this rate, within a context of an economy based mainly in subsistence agriculture, is certainly experiencing a process of accelerated *overurbanization* with disastrous consequences that may become worst in the future. It is interesting to notice that in many cities in the Third World, self-employment or own-account employment in the form of street vending, provision of petty services and other so-called informal activities

are major forms of economic insertion of the excess of workers. In the specific case of Dili, given the heterogeneity of occupations that comprises the own-account category of workers indicated earlier, it is difficult to assess to what extent such type of informal activities are absorbing many workers. What seems clear, however, is that the subsistence sector is the major source of employment for the labor over-supply (see Table 7).

Table 9
Decomposition of the population growth in Dili
during 1999 to 2004

Residents in 1999	100,715
In-migrants 1999-2004	29,573
Immigrants 1999-2004	11,495
Natural increase 1999-2004 (births minus deaths)	31,758
Total increase	72,826
Total population 2004	173,541
Percentage contribution of:	
Natural increase	43.6
In-migration	40.6
Immigration	15.8
Total	100.0

7. Regional differences

The population of Timor-Leste consists of a number of distinct ethnic groups, mainly of Malayo-Polynesian and Melanesian-Papuan origin. Among the former are the Tetum, Mambae, Tokodede, Galoli, Kemak and Baikeno and among the latter the Bunak, Fataluku and Makasae.

As mentioned earlier, the major form that the conflict in Timor-Leste has adopted is a clash between westerners and easterners, but with unclear ethnic divisions. Several ethnic groups live in the east part of Timor-Leste and several others in the western part, but ethnic intolerance or racial prejudice are not part of the conflict. As indicated before, the main apparent issue is the role that easterners and westerners played during the Indonesian occupation. Westerners are accused by the easterners of compliance with the Indonesian or of an uncommitted opposition. On the other hand westerners blame easterners of economic, social, and political discrimination. Ethnic groups matters only because of their traditional geographical location in the east or west but not because of ethnicity itself.

The purpose of this section is to show how different are the populations of the eastern and western part of Timor-Leste regarding some selected socioeconomic variables. The

classification used in the following tables includes the two regions, east and west, and Dili. Although the capital city is located in the west, for the purpose of this analysis, it is more adequate to regard it as a separate unit.

Table 10 shows the percentage illiteracy in the two regions and Dili. The lowest level of illiteracy is in the capital city, with a percentage well below the national average. The percentages exhibited by the east and west are higher than the national level, but the percentage illiteracy is higher in the west than in the east. The difference, although important, it is not substantial. It is interesting to notice that some districts in the west have a level of illiteracy slightly lower than the eastern average. It is the case of Manufahi and Covalima. In all cases, percentages of illiterates among females are higher than among males.

Table 10
Timor-Leste: Percentage of the population 8
years and older who are illiterate by sex
according to region and district, 2004

Regions and Districts	Both sexes	Male	Female
Total	51.7	47.3	56.2
Dili	23.0	20.0	26.5
East	54.9	49.9	59.7
Baucau	50.6	46.7	54.5
Lautem	58.2	52.5	63.6
Viqueque	58.7	52.8	64.2
West	60.2	56.3	64.0
Aileu	58.3	54.8	62.0
Ainaro	60.6	57.7	63.6
Bobonaro	62.2	57.7	66.6
Covalima	51.7	47.6	55.7
Ermera	69.1	64.8	73.5
Liquica	59.7	54.5	65.0
Manufahi	49.3	46.1	52.6
Manatuto	58.4	55.1	41.4
Oecussi	60.1	57.5	62.5

Table 11 shows the percentage of the population 12 years and older with complete primary studies. The pattern is the same as in the case of illiteracy. The highest percentage is observed in Dili, with more than 60%. The percentage in the two regions is much lower than in the capital city, although somewhat higher in the eastern than in the western region.

As in the case of illiteracy, important internal variations among the districts can be observed within the regions. As expected, percentages are higher for male than for females.

Table 11
Timor-Leste: Percentage of the population
12 years and older with complete primary
education, 2004

Regions and Districts	Both sexes	Male	Female
Total	35.4	38.9	31.8
Dili	61.4	63.8	58.7
East	31.9	35.2	28.7
Baucau	32.1	34.0	30.2
Lautem	36.0	40.8	31.7
Viqueque	28.2	32.7	24.1
West	27.6	30.8	24.5
Aileu	26.6	29.0	24.0
Ainaro	27.8	30.6	25.0
Bobonaro	25.4	28.9	22.0
Covalima	36.0	39.6	32.5
Ermera	22.2	26.0	18.3
Liquica	24.2	28.3	20.2
Manufahi	37.2	40.0	34.2
Manatuto	29.6	32.1	27.2
Oecussi	27.9	30.0	25.8

The type of insertion in the labor market by regions and districts is shown in Table 12. Dili exhibits the most *modern* type of insertion although also the highest unemployment rates and a sizeable subsistence sector. This pattern was already observed and interpreted in Table 7. On the other hand, the subsistence sector is absolutely predominant in the regions and their districts. Percentages of the labor force in this economic sector are not much different between regions or districts; most values fluctuate about 80%. The exceptions are the districts of Bobonaro and Covalima, with percentages around 70%. Actually, these two districts are the main reason why the western part of the country has a lower percentage of its labor force in the subsistence sector. The distribution of the labor force by the other type of activities or that are unemployed according to district shows important variations. For example in Manatuto the own-account workers are only 3.8% and in Liquica 13.8%. Unemployment in Liquica, Manufahi and Oecussi are around 2% while in Bobonaro almost 9%. The analysis of these differences goes beyond the purpose of this paper but it is important point out the need to study them in the future in relation to regional development issues.

Table 12
Timor-Leste: Economically active population by sex and type of labor force insertion according to region and district, 2004

Regions and District	Both sexes				Male				Female						
	Formal or modern sector	Own-account	Subsistence sector	Unemployed or discouraged	Total	Formal or modern sector	Own-account	Subsistence sector	Unemployed or discouraged	Total	Formal or modern sector	Own-account	Subsistence sector	Unemployed or discouraged	Total
Total	10.9	9.7	70.9	8.5	100.0	13.1	8.1	69.0	9.8	100.0	7.8	11.9	73.5	6.7	100.0
Dili	26.3	16.4	30.3	26.9	100.0	31.7	18.2	16.8	33.3	100.0	17.6	13.5	52.3	16.6	100.0
East	7.9	6.4	81.1	4.6	100.0	10.2	4.9	80.6	4.4	100.0	5.0	8.3	81.7	5.0	100.0
Baucau	8.9	9.7	76.7	4.7	100.0	10.8	7.2	77.4	4.6	100.0	6.7	12.6	75.9	4.8	100.0
Lautem	8.4	3.3	83.0	5.3	100.0	11.6	2.9	80.7	4.8	100.0	3.8	3.8	86.4	6.0	100.0
Viqueque	6.0	3.1	86.9	4.0	100.0	8.2	2.8	85.4	3.6	100.0	2.7	3.5	89.1	4.6	100.0
West	7.7	9.1	78.5	4.7	100.0	8.5	6.2	80.7	4.6	100.0	6.5	13.0	75.6	4.9	100.0
Alku	6.5	6.5	84.3	2.8	100.0	6.6	7.7	82.4	3.3	100.0	6.4	5.0	86.5	2.1	100.0
Anaro	6.6	6.6	84.0	2.8	100.0	8.6	4.8	82.7	3.8	100.0	4.4	8.5	83.3	1.7	100.0
Bobonaro	8.5	12.5	70.2	8.8	100.0	9.8	7.3	75.2	7.7	100.0	6.5	20.3	62.7	10.5	100.0
Cova Lima	10.6	13.4	71.3	4.8	100.0	10.9	8.5	76.1	4.5	100.0	10.1	20.2	64.6	5.1	100.0
Ermera	5.3	5.0	82.0	7.7	100.0	6.3	4.9	82.7	6.1	100.0	3.3	5.1	80.7	10.9	100.0
Liquica	6.2	13.8	77.7	2.2	100.0	8.4	6.8	82.4	2.3	100.0	3.2	23.5	71.3	2.0	100.0
Mamfushi	6.0	10.8	81.0	2.2	100.0	8.4	7.4	82.0	2.1	100.0	3.3	14.6	79.9	2.2	100.0
Manuhito	6.2	3.8	85.1	5.0	100.0	8.0	3.0	84.3	4.7	100.0	3.7	4.8	86.1	5.4	100.0
Oecussi	12.2	8.7	76.8	2.3	100.0	9.9	5.6	81.9	2.7	100.0	14.6	12.1	71.5	1.8	100.0

Table 13 shows the per capita livestock by region and district. In any country with a predominantly subsistence economy the possession of livestock is a valid indicator of food security, wellbeing, and economic and social status. The amount of certain animals may differ among districts because of geographic characteristics, but the data in Table 13 gives a good general picture of this component of socioeconomic differences among regions and districts. The most important animals in terms of self consumption and barter are chickens and pigs and in terms of socioeconomic status are buffalos, which are also the traditional currency for paying the price of the bride.

Table 13
East-Timor: Livestock per capita according to region and district, 2004

Regions and Districts	Chickens	Pigs	Sheeps	Goats	Horses	Cattle	Buffalo
Total	0.97	0.48	1.01	0.60	0.37	0.67	0.87
Dili	0.76	0.35	0.56	0.66	0.32	0.51	0.66
East	1.22	0.60	1.11	0.75	0.48	0.96	1.15
Baucau	0.90	0.46	1.14	0.76	0.46	0.77	1.02
Lautem	1.38	0.62	1.44	0.79	0.46	0.90	1.09
Viqueque	1.54	0.78	0.58	0.70	0.53	1.10	1.29
West	0.89	0.45	0.80	0.52	0.30	0.60	0.63
Aileu	0.70	0.39	0.37	0.41	0.30	0.55	0.55
Ainaro	0.84	0.44	1.88	0.69	0.32	0.61	1.12
Bobonaro	0.85	0.45	0.35	0.47	0.32	0.55	0.60
Covalima	0.60	0.31	0.31	0.34	0.25	0.33	0.35
Ermera	0.64	0.33	0.33	0.37	0.27	0.39	0.43
Liquica	1.07	0.57	0.38	0.57	0.30	0.74	0.80
Manufahi	1.00	0.58	0.72	0.54	0.34	0.70	0.58
Manatuto	0.92	0.44	0.46	0.52	0.26	0.43	0.50
Oecussi	1.39	0.57	0.92	0.69	0.39	0.76	0.61

As expected, the livestock per capita values for Dili are low; although surprisingly high considering that it is the capital city and the main urban center. The eastern region has the highest per capita values regarding all the animals considered, in some case much higher than the national and western region averages (see, for example, chickens and buffalos). It is relevant to notice also that there are substantial variations among districts belonging to

the same region. For example, Covalima and Ermera exhibit much low values than the other district in the western region.

Finally, Table 14 shows basic demographic indicators by region and district. Infant mortality, a valid indicator of the welfare of the population, is not much different between the eastern and western parts of the country. Total fertility rates (TFR) are also similar though a little higher in the west. The main difference can be observed among the districts and between them and Dili. Notice, for example that infant mortality is over 100 deaths per 1,000 birth, in Viqueque (east), Ainaro, Bobonaro, and Oecussi (west), while in Dili it is about 40% lower. TFR is extremely high in some districts such as Aileu, Ermera and Ainaro (west). Regarding internal lifetime migration, as expected, Dili have highest net migration rate; all the other districts have negative net rates, indicating population losses, or rates are very low. The eastern part of the country has higher negative net rates than the west. The data clearly suggest that the main destination of in-migrants is Dili.

Table 14
Timor-Leste: Selected demographic indicators by region and district, 2004

Regions and District	Infant mortality rate	Total fertility rate	Lifetime migration		
			In-migration rate	Out-migration rate	Net migration rate
Total	98	7.0			
Dili	60	5.2	46.0	4.8	41.2
East	96	7.2	5.0	13.0	-7.9
Baucau	99	7.2	5.7	15.9	-10.2
Lautem	83	7.8	3.1	11.7	-8.6
Viqueque	103	6.7	5.7	19.7	-14.0
West	97	7.6	7.9	12.0	-4.2
Aileu	94	9.1	16.1	19.6	-3.5
Ainaro	111	8.2	7.9	15.5	-7.6
Bobonaro	109	6.8	5.8	15.0	-9.2
Covalima	97	6.8	9.4	9.1	0.3
Ermera	98	8.6	6.0	9.4	-3.3
Liquica	81	7.9	7.1	10.0	-3.0
Manufahi	85	7.6	11.1	11.8	-0.8
Manatuto	79	6.4	8.0	19.4	-11.4
Oecussi	103	6.3	5.4	4.4	1.0

The main conclusion that can be drawn from the previous information is that the eastern and western parts of Timor-Leste are different in some relevant socioeconomic characteristics, but those differences are not substantial or do not exist at all. In general, the population in the eastern region appears to be better off than that in the west region. Educational levels are higher in the east than in the west and per capita livestock numbers also favor the east. Concerning the type of insertion in the labor market, the subsistence

sector prevails in both regions, although in the eastern region the percentage of the labor force in this sector is a little higher. However, much important than the differences between the eastern and western part of the country is the diversity between districts. Moreover, differences between east and west are explained mainly by the good or poor socioeconomic conditions of specific district than by uniform regional characteristics. The purpose here was not to analyze and interpret these differences but just to show them and examine whether or not they can be a component of the conflict. It does not seem that the rivalry between easterners and westerners can be attributed to socioeconomic differences in the east and west parts of the country. Variations at this level are not substantial and more important are variations at the district level. As indicated by most tables in this section, socioeconomic differences among districts within the same region are larger than differences between the two regions.

8. Natives, Easterners and Westerners in Dili

As indicated in the theoretical framework, urban-ward migration could have destabilizing influences not only because it may cause heavy of population pressures on the labor market, on housing and on services, but also because of the ethnic or regional diversity that it encompasses. People with different characteristics become in close contact in the city and competition may surface especially concerning jobs or housing. Considering that a major component of the Timor-Leste crisis is the east-west rivalry, an analysis of selected characteristics of eastern and western migrants in Dili, as well as natives of the capital, is essential in this study.

For this analysis, the population of Dili was classified by place of origin: natives of Dili, lifetime in-migrants from the eastern part of the country, lifetime in-migrants from the western part and immigrants from abroad. Lifetime migration was considered more important than recent inward migration given that, for this study, origin is more important than migration streams or patterns.

Table 15 shows Dili's population by place of origin. As it is also indicated in Table 8, more than half of the population are non migrants and 42.5% inward migrants, with 15.7% from the east, 23.6% from the west and 3.5% from overseas. In all cases, the percentage of inward migrants is higher among males. Notice that in-migrants from the east are over-represented in the sense that they constitute 39.9% of all in-migrants while they are only 24.1% of the country's population.

Table 15
Dili: population distribution by sex
according to place or origin, 2004

Origin	Both sexes	Male	Female
Dili	54.0	52.4	55.9
East	15.7	17.0	14.2
West	23.6	24.1	23.0
Abroad	3.2	3.0	3.4
Unknown	3.5	3.5	3.5
Total	100.0	100.0	100.0
N	173,541	92,542	80,999

In-migrants from the eastern part of the country are better educated than the native Dili's population and than the in-migrants from the west. According to Table 16, 15.1% of the in-migrants from the east are illiterate while the percentages for those from the west and those born in Dili are 23.2% and 27.8%, respectively. Table 17 shows the percentage of the population (12 years and older) with complete primary education. The percentages corresponding to Dili natives and in-migrants from the west are similar (57.0% and 58.2%, respectively), but that corresponding to eastern in-migrants is 71.0%. The best educational level is shown by the immigrants. As suggested earlier, it is likely that most of them are the children of well-off merchants and professionals, or the children of refugees that had better chances of education while living abroad. As in previous analyses of educational variables, males have a better educational level than females. Notice, however, that gender differences among the Dili native population are smaller than among in-migrants, both from the east and from the west. Gender differences among immigrants do not exist. A special study on migration patterns and differentials should consider these issues.

Table 16
Dili: Percentage of illiteracy among
the population 8 years and over by sex
according to place of origin, 2004

Origin	Both sexes	Male	Female
Dili	27.8	26.3	29.5
East	15.1	11.3	20.5
West	23.2	18.9	28.2
Abroad	5.3	5.2	5.4
Total	23.1	20.1	26.6

Unknown origin is not included

Table 17
Dili: Percentage of the population 12 years
and over with complete primaty education
by sex according to place of origin, 2004

Origin	Both sexes	Male	Female
Dili	57.0	57.8	56.1
East	71.0	74.5	66.1
West	58.2	61.6	53.9
Abroad	86.9	86.2	86.2
Total	61.5	64.0	52.0

The insertion of the labor force in Dili exhibits important differences according to place of origin as indicated by Table 18. A larger percentage of in-migrants than Dili natives are engaged in modern or formal sector activities, and the percentage is larger among in-migrants from the east than from the west. The percentage of immigrants is similar to that corresponding to easterners. A comparatively low percentage of immigrants are engaged in the subsistence sector while more than 40% of the labor force born in Dili shows this type of labor insertion. In-migrants from the east exhibit also a comparatively low participation in the subsistence sector while the percentage corresponding to in-migrants from the west is somewhat higher, although lower than among Dili natives. A high proportion of the population born abroad is in the own-account category; also the insertion of easterners in this class is comparatively high. As mentioned above, due to the variety of the occupations included in this type of labor insertion, explanations and interpretations are difficult. A sound understanding of the relationship between place of origin and own-account workers would require additional data.

Table 18**Dili: Percentage distribution of the labor force by place of origin according to sex and type of labor insertion, 2004**

Type of labor insertion	Dili	East	West	Abroad	Total
Both sexes					
Formal or modern sector	20.3	32.4	27.7	31.9	26.3
Own-account	11.0	20.0	15.6	40.9	16.3
Subsistence sector	41.5	21.3	27.6	16.1	30.6
Unemployed or discouraged	27.2	26.3	29.1	11.1	26.8
Total	100.0	100.0	100.0	100.0	100.0
Male					
Formal or modern sector	24.1	38.6	34.1	33.9	31.7
Own-account	12.2	20.8	17.4	50.3	18.1
Subsistence sector	30.0	9.3	12.3	2.8	17.2
Unemployed or discouraged	33.7	31.3	36.3	13.0	33.0
Total	100.0	100.0	100.0	100.0	100.0
Female					
Formal or modern sector	14.8	20.3	19.5	29.1	18.3
Own-account	9.3	18.4	14.5	27.9	14.1
Subsistence sector	58.2	44.8	61.3	34.4	54.9
Unemployed or discouraged	17.7	16.5	4.7	8.5	12.7
Total	100.0	100.0	100.0	100.0	100.0

Table 19 shows the origin of Dili population by selected characteristics of the dwelling in which they live. Three construction features are examined: external walls, roof and floor. Only the construction material considered as the better was used in the analysis; hence the higher the percentage, the better the housing conditions of the group. Differences are not substantial. Notice that they are insignificant between eastern and westerners but a little more important between Dili natives and immigrants.

Table 19

Dili: Population distribution by main construction material of their dwellings according to place of origin, 2004

Origin	Walls:	Roof:	Floor:
	Concrete/brick	Corrugated iron	Concrete/tiles/wood
Total	81.6	91.8	79.5
Dili	76.5	89.8	72.8
East	89.2	94.8	89.8
West	86.8	94.5	86.3
Abroad	91.6	92.4	94.0

The information provided by the previous tables contains evidence that in-migrants from the eastern part of the country are economically and socially better off than the rest of Dili's population (except for the small proportion of immigrants). Although differences are not considerable, they are evident. The data do not permit to establish whether or not this better position of easterners in Dili is the result of a positive discrimination (favored by their more committed role in the resistance to the Indonesian occupation) or it is related to historical reasons. What this analysis does show is that easterners, westerners and Dili natives are different concerning selected socioeconomic variables, and that differences may be a stress factor on the stability of the city and entire country. In other words, the differences observed may increase the vulnerability of Dili population to civil strife and are, probably, an important component of the present unrest. It is a paradox that the natives of Dili were the group with the lowest position in the socioeconomic indicators just examined, but Dili is the district with the best socioeconomic indicators, as shown in the previous section. It is likely that this paradox is in the roots of the emergent regional rivalries.

Immigrants represent a small and diverse group in Dili mosaic. The indicators considered suggest that they are the better-off category. It seems that its role in the conflict has not been of major relevance, at least as a social group

Table 20 and 21 shows residential segregation, another possible component of the conflict. This concept refers to the level and degree of residential separation and spatial isolation of the population of a urban agglomeration (McKibben and Faust, 2004). In general, a high level of residential segregation is considered to have destabilizing influences and pondered as a conflict stress factor (Massey and Denton, 1988). The units in which segregation was measure are *sucos*. They are small sub-divisions of traditional origin (villages) that in urban areas can be considered equivalent to a small neighborhood. Table 20 refers to the place of origin of entire population and Table 21 to the place of origin of household heads.

Table 20

Dili: Population distribution by place of origin according to suco of residence, 2004

Suco	Dili	East	West	Abroad	Total	N
Lahane Ocidental	71.6	4.2	23.3	1.0	100.0	4,116
Vila Verde	56.5	12.0	28.6	2.9	100.0	7,417
Macarenhas	55.4	11.7	30.3	2.6	100.0	5,922
Caicoli	42.9	19.8	32.8	4.5	100.0	2,560
Colmera	45.9	14.2	26.7	13.2	100.0	1,998
Motael	46.0	16.4	28.9	8.6	100.0	2,906
Dare	80.1	2.8	16.6	0.5	100.0	2,380
Santa Cruz	49.9	33.5	13.2	3.4	100.0	3,899
Acadiru Hun	61.1	11.2	21.2	6.5	100.0	1,174
Bemori	64.4	14.0	17.2	4.4	100.0	3,689
Lahane Oriental	63.5	7.0	27.8	1.8	100.0	6,568
Bidau Lecidere	57.9	11.5	21.5	9.1	100.0	1,145
Gricenfor	51.6	19.3	19.7	9.4	100.0	1,603
Sabuli	87.4	2.5	8.8	1.3	100.0	1,221
Duyung (Sereia)	82.3	2.9	13.6	1.2	100.0	2,144
Atauro Vila/ Maumeta	94.5	2.3	2.4	0.9	100.0	1,280
Maquili	99.7	0.0	0.3	0.0	100.0	1,744
Beloi	98.5	0.3	0.7	0.5	100.0	1,636
Macadade	99.7	0.1	0.2	0.0	100.0	1,431
Biceli	96.5	0.6	1.1	1.8	100.0	1,707
Fatuhada	42.3	29.1	24.7	3.9	100.0	4,964
Kampung Alor	41.9	14.9	26.4	16.8	100.0	3,037
Comoro	38.4	22.1	35.6	4.0	100.0	39,451
Bairro Pite	50.1	14.6	31.9	3.4	100.0	21,013
Culu Hun	66.9	9.1	20.8	3.2	100.0	6,484
Becora	59.9	22.4	16.2	1.4	100.0	17,529
Camea	61.5	24.4	13.5	0.7	100.0	6,077
Hera	77.4	12.3	9.2	1.1	100.0	5,488
Balibar	77.3	0.8	21.8	0.0	100.0	1,328
Meti Aut	84.9	3.5	8.7	2.9	100.0	549
Bidau Santana	72.4	14.9	11.2	1.5	100.0	4,970
Total	56.0	16.2	24.4	3.3	100.0	167,430

Table 21

Dili: Distribution of household heads by place of origin and suco of residence, 2004

Suco	Dili	East	West	Abroad	Total	N
Lahane Ocidental	49.0	7.3	42.4	1.2	100.0	180
Vila Verde	27.4	19.2	49.3	4.0	100.0	186
Macarenhas	22.2	17.7	56.0	4.1	100.0	162
Caicoli	10.0	30.9	52.3	6.8	100.0	79
Colmera	20.7	18.5	43.6	17.2	100.0	57
Motael	24.1	22.9	41.6	11.4	100.0	106
Dare	62.7	5.2	31.7	0.4	100.0	111
Santa Cruz	20.5	52.3	22.6	4.6	100.0	124
Acadiru Hun	34.0	16.0	40.2	9.8	100.0	50
Bemori	41.8	20.6	31.5	6.1	100.0	127
Lahane Oriental	35.3	9.9	52.9	1.9	100.0	229
Bidau Lecidere	30.7	15.8	29.3	24.2	100.0	55
Gricenfor	27.7	31.2	27.7	13.4	100.0	72
Sabuli	72.7	4.6	21.9	0.8	100.0	61
Duyung (Sereia)	69.2	5.2	25.2	0.4	100.0	127
Atauro Vila/ Maumeta	84.7	6.0	7.3	2.0	100.0	43
Maquili	99.7	0.0	0.3	0.0	100.0	77
Beloi	97.0	0.3	1.6	1.1	100.0	80
Macadade	99.7	0.3	0.0	0.0	100.0	34
Biceli	93.9	1.4	1.9	2.8	100.0	79
Fatuhada	17.7	41.0	35.9	5.3	100.0	111
Kampung Alor	18.5	19.7	37.6	24.2	100.0	75
Comoro	12.4	31.7	51.2	4.7	100.0	1,052
Bairro Pite	20.7	22.4	53.4	3.6	100.0	435
Culu Hun	42.0	14.1	39.1	4.8	100.0	251
Becora	31.8	35.3	31.3	1.6	100.0	569
Camea	38.1	36.7	24.3	0.9	100.0	280
Hera	58.6	21.5	19.3	0.6	100.0	157
Balibar	60.4	0.4	39.2	0.0	100.0	65
Meti Aut	74.0	5.8	15.4	4.8	100.0	29
Bidau Santana	47.0	26.1	24.8	2.1	100.0	226
Total	31.8	24.2	39.7	4.3	100.0	5289

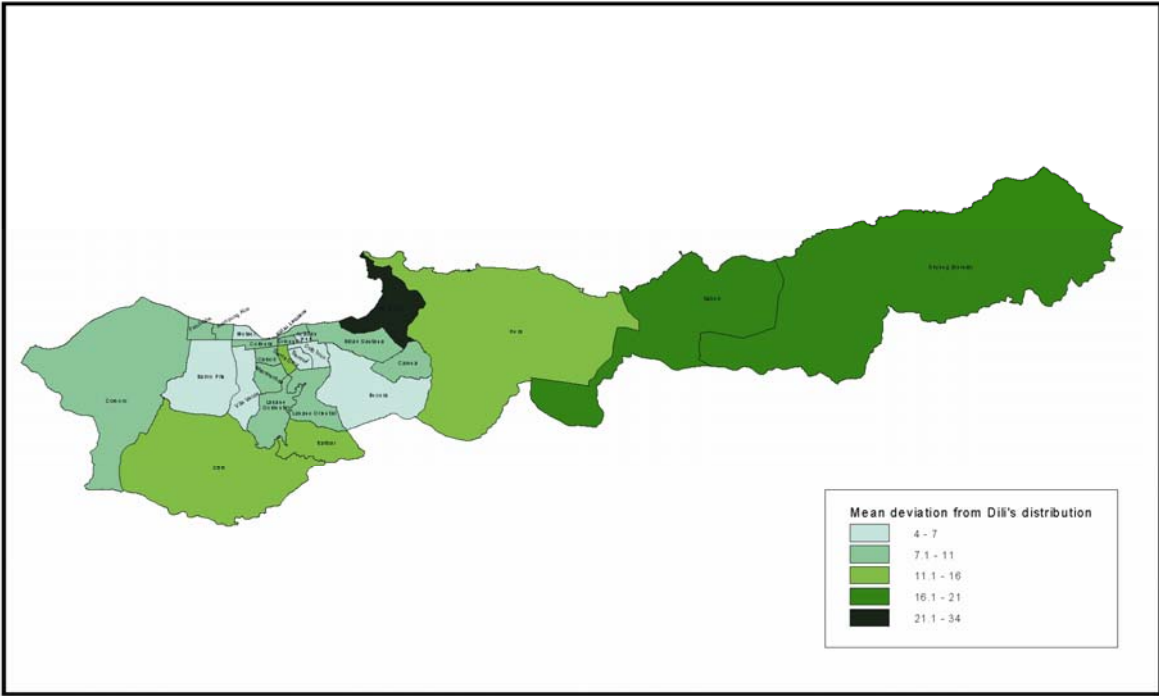
The two tables show some degree of segregation. This is appreciated by comparing the total distribution by place of origin with the distribution along the different *sucos*. For example, the first *suco* in Table 20, *Lahane Ocidental*, cluster a higher proportion of Dili natives (71.6%) than one may expect considering the percentage of them in the city (56.0%). On the contrary, this *suco* houses only 4.2% of the population of eastern origin while they represent 16.2% in the city. There are 5 *sucos* that exhibit a substantially high degree of concentration of Dili natives (Atauro Vila, Maquili, Beloi, Macadade and Biceli). These

sucos are all located in the island of Atauro, located in front of Dili, 27 kilometer away. Probably because of its relative isolation and undiversified economy, it is not an attractive place for migrants.

An examination of Tables 20 and 21 indicates that residential segregation is not high and it does not suggest the existence of *ghettos* or enclaves of in-migrants from the same origin. The data suggest, however, a certain preference or tendency of persons of the same origin to cluster in some areas. Even if the Atauro *sucos* are not considered, people of the same origin tend to crowd together in some *sucos*. For example, *Santa Cruz* and *Fatuhade* tend to concentrate a comparatively high proportion of easterners while *Comoro* and *Caicoli* a high proportion of westerners.

The spatial distribution of residential segregation based on the place of origin of household heads is shown in Map 2. Each *suco* received a value consisting of the mean absolute deviation of its distribution from the overall distribution⁶. The mean values vary from 6, which indicates a low segregation, to 34, which indicates a high degree of segregation. Because of its special economic and geographic situation, Atauro Island is not included.

**Map2:
Residential segregation in Dili**



⁶ For example, in Lahane Ocidental the percentages corresponding to the four groups, Dili natives, easterners, westerners and foreign born, are 49.0, 7.3, 42.4 and 1.2%, respectively. The corresponding distribution in Dili is 31.8, 24.2, 59.7 and 4.3%. Thus, the value for this *suco* is computed as follows: $[\text{abs}(49.0-31.8)+\text{abs}(7.3-24.2)+\text{abs}(42.4-59.7)+\text{abs}(1.2-4.3)]/4 = 9.96$.

Table 22
Indices of dissimilarity for the residential
distribution of the population and household
heads in Dili according to place of origin

Place of origin	Indices*	
	A	B
Population		
Dili natives	25.4	22.2
East in-migrants	23.4	21.1
West In-migrants	23.7	20.6
Immigrants	25.4	23.7
Household heads		
Dili natives	37.5	31.4
East in-migrants	25.6	22.5
West In-migrants	25.8	21.6
Immigrants	29.1	27.7

* Indices A include the island of Atauro which, although it is part of Dili, is an atypical area for the analysis of residential segregation (see text). In indices B the 5 *sucos* of Atauro have been excluded from the calculations.

Table 22 shows the results of the calculation of indices of dissimilarity. This measure summarize the level of segregation by measuring which percent of the population needs to change its residence to remove completely residential segregation, that is, to have in each sub-units (*sucos*) the same overall allocation (Dili's distribution). For example, 25.4% of the population born in Dili would need to move to another *suco* in order to eliminate the residential segregation experienced by this group regarding the other groups; and 23.4% of people of eastern origin have to change residence to another *suco* so as to eliminate the segregation of this group with respect to the other three origins. Table 22 also shows the indices of dissimilarity when the 5 *sucos* of Atauro Island are not included in the calculations. The indices decline a little considering the high concentration of Dili natives in the island.

In general, the results of Table 22 corroborate a medium level of residential segregation, that is, there is a trend toward spatial concentration but not a prevalence of highly concentrated enclaves of easterners, westerners or natives. It is an open question whether or not this level residential segregation has been a risk factor of the Timor-Leste crisis, and in particular in Dili. This is not an easy issue in the specific context of this conflict. As pointed out earlier, residential segregation is pondered in the literature as a destabilizing factor mainly because it tends to reduce interactions between people of different backgrounds and prevent them from establishing diverse types of relations that minimize

possible conflicts. In addition, in highly segregated areas minority groups are more vulnerable to hostility than in areas with population of mixed backgrounds mainly because in segregated places they are isolated and, therefore, lack of a protection network from its own community. However, on the other hand, when two communities are engaged in an open conflict, violence could be more intense in mixed areas where rival groups are in close contact on an every day basis. It is important to remember that one of the most violent actions in the Timor-Leste conflict has been the burning of houses belonging to families of a given origin by gangs of youths of another origin. Therefore, the questions are: Are families of a particular origin less vulnerable in mixed *sucos* because they are not as isolated as if they were living in segregated *sucos*? Or, on the contrary, is the degree of social turbulence higher in mixed *sucos* because of the physical proximity of rival communities? It is not possible to examine these questions with the available information, but it would be quite relevant to correlate the degree of residential segregation at the *suco* level with the number of violent events that have taken place in each *suco* since the beginning of the conflict.

10. Conclusions

This study has attempted to identify and examine possible demographic components in the civil conflict that Timor-Leste is currently experiencing. Using a theoretical framework that proposes that the position of societies in the process of demographic transition is related to vulnerability to conflict, three socio-demographic risk factors were analyzed: a) a high proportion of teenagers and young adults in the population combined with little opportunities of employment other than in the predominant subsistence sector of the economy; b) high in-migration rates to Dili and the consequent rapid urbanization that the capital city is experiencing; and c) the surfacing of a strong regional component in the conflict as a result of the presence in Dili of migrants of different origin.

There is convincing evidence that, in fact, the previously mentioned variables have been important stress factors and they have shaped some of the main characteristics of the conflict. The facts that the unrest is centered mainly in Dili and that it has adopted the form of violent street gang fights representing eastern in-migrants on one side and westerners and Dili natives on the other, suggest that the previously mentioned three demographic processes are, in fact, factors that have increased the vulnerability of the community to civil conflict.

It is important to mention that what is proposed here is not that demographic factors are *the cause* of Timor-Leste civil unrest. The conflict is complex, caused by the interaction of multiple determinants, and cannot be reduced to demographic processes. However part of the problem is related to the population position of the country at the initial stages of the demographic transition.

Population changes will not avoid or put an end to civil conflicts. Therefore, policies directed to modify demographic patterns and processes are not likely to resolve unrest and instability. Nevertheless, they may facilitate conflict resolution. In fact, it is evident that in

Timor-Leste any politically and socially acceptable solution to the present crisis should include the implementation of economic policies directed to transform the traditional labor market so as it may provide young people decent occupations with reasonable salaries. In addition, the government should invest in training and in promoting entrepreneurship among youth. Policies in this direction should be implemented both in Dili and in the districts. The result will certainly be less frustrated youngsters, who will be more socially integrated, and less prone to violence. In addition, creation of non subsistence employment in the districts is likely to reduce the heavy Dili-ward migration stream that has been taking place during recent years.

The specification of economic and occupational policies of the type mentioned above is outside the scope of this study. However, it is important to point out that whatever the economic policies and measures to be designed are, demographic considerations should be taken into account.

Population in East-Timor is growing extremely fast (3.2% per year). The working age population is growing faster (3.4%) and the 15 to 24 years population, which is usually entering the labor force, is growing even faster (3.7%). This growth is even more substantial in Dili due to in-migration. A simple projection exercise, considering that fertility, mortality and in-migration in the capital city will remain constant in the next few years, indicates that the population of the city will increase from 175,730 to 233,508 between 2004 and 2009, that is, an annual increase of 5.7%. In 2014, if mortality, fertility and net migration rates remain constant, the population of Dili will be 303,115, that is, the population will increase by 72.5% in 10 years.

Planners and policy makers must find forms to accommodate this population in the economy and, in general, in the society. The problem is that there is no pace of economic growth, no matter how rapid and sustained it may be, no feasible employment structures reforms to be carried out, and no possible job creation policies to be implemented, that will be able to result in an occupational absorption of such a huge labor force increase. This massive labor force supply will undoubtedly become a major economic, social and political problem both in rural and in urban areas.

A population policy directed to reduce population growth should be considered seriously and its discussion should start at different level of the civil society. Unless substantial changes are introduced in the demography of the country, population issues will increase its potential as civil conflict stress factors and reduce the capacity of the society to response to outbreaks of violence. It is important to recognize that population policies directed specifically to curb population growth are polemic and viewed with suspicion by several social sectors (Vilquin, 2006). Hence, the government should promote this demographic change by supporting access to voluntary family planning services, increasing women's school attendance and improving women's access to economic opportunities.

It is also important to mention that many agricultural development programs do not have a major impact in retaining the population in rural areas. On the contrary, it may have the opposite effect and increase rural out-migration (Baldi, S. and R. Cagiano de Azevedo, 2006; United Nations Population Division, 1993). This almost inevitable outcome suggests

the need to develop alternative destinations for rural out-migrants to avoid the *overurbanization* in the primate city, in this case Dili. The specific policies to accomplish are of economic nature and not demographic issues. However, demographic studies are necessary to realize the extent to which rural-urban migration is inevitable and to understand the complexities of migration patterns and trends regarding alternative attraction poles.

A final issue to be considered is residential segregation. As mentioned before, at present, Dili is scattered by internally displaced persons (IDP) camps crowded with families that have lost their houses or are too scared of the violence to return to their homes. This problem has basic economic components in terms of allocating funds for the reconstruction of houses and implementing security strategies to stop house burning as a form of confrontation. However, there are also social and demographic matters that are not easy to tackle. A housing policy to solve the problem of the numerous families that have lost their houses should not increase residential segregation; on the contrary, it should promote integration. The problem is how to avoid the immediate security problems that integrated neighborhood may pose. Serious, in-depth and rigorous studies are necessary to evaluate this issues and design adequate and satisfactory housing policies.

As a summary, it is possible to state a general conclusion: Demographic issues do matter in the crisis that Timor-Leste is suffering and demographic data and analyses may make substantial contributions to policies, measures and strategies directed to a return the country to normality.

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