The Major Problems That Africa is Facing Today, 2018

Poor Governance, Corruption and Insecurity – Some of the Major Problems Confronting Africa.

(Naipanoi Lepapa,2017). None of Africa's problems is beyond the means and resources within the continent. What has largely lacked is proper policy making and implementation. It's worth to look at factors that have inhibited the general well-being of the African people. In the African case, unlike many developed countries or other continents, there is a shared theme cutting across the countries with many individuals believing most of the problems facing the continent largely lie or can be resolved by the ruling elite. The problems facing African countries raised by the people surveyed in the report mirror those raised in several others economic and development reports.

1. Poor Governance

The report says, African countries have undergone two forms of governance liberation, yet remain stuck in the middle of a third one. First, it was the struggle for independence from the colonial rule then liberation from dictatorships that merged from independence. Now, many African countries are facing a struggle of getting proper democratic governance.

In several countries, incumbent long serving political leaders have found ways to manipulate the electoral process. Aside from increasing term limits, the methodical undermining of the opposition parties and leaders along with civil societies is widespread across the nations. The challenge for current governments regardless of systems used, is the creation and implantation of policies which reflect of the immediate and future needs of the people. Healthcare, security, political stability, and development projects are all affected by poor governance.

2. Corruption

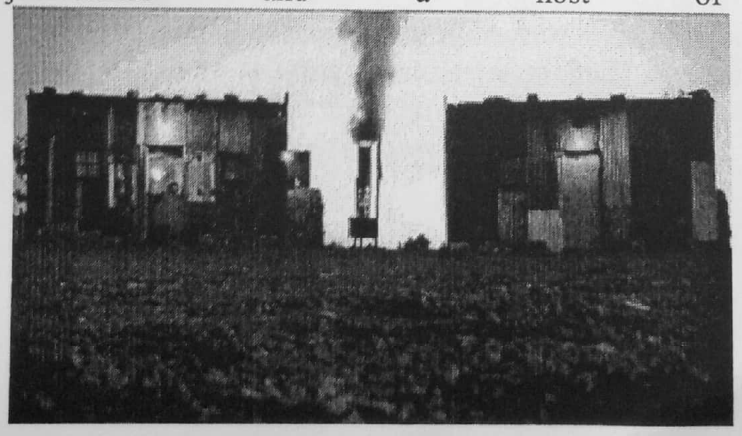
Corruption is endemic to the way of life in much of Africa. It has permeated all life facets from simple things like access to medical care, schools and jobs, to the grand scale of it all like award of contracts and use of public resources. The effect has been great inequalities both in access of services from government offices as well as opportunities for investment with many local and foreign firms discouraged and forced to close business. Misappropriation of public funds and biased awarding of tenders compromises on the quality service available to the members of the public.

Africa's Most (and Least) Corrupt Countries

Not a single country comes close to top marks while over 120 countries score below 50 on the scale of 0 (highly corrupt) to 100 (very clean). As a result the huge gap between the classes is further enhanced. While strides are being made by respective governments, the perceptions of corruption and level of trust to the government and the organs show the situation is still far from ideal. Corruption affects key sectors like healthcare, education and infrastructure resulting in poor living conditions.

3. Unemployment

The whole world may be facing a surge of unemployment especially among the youth but the case for Africa is more precarious. This is because governments do not sufficiently invest in youths. As the labor force increases, there is a huge disconnect between the older generation in majority of the policy and decision making organs and the ever expanding youth population. From the education to employment opportunities and entrepreneurship plans and assistance, the governments face challenges on how best to mitigate for what has been described as a time bomb. This in turn contributes to lower family incomes with many dependents, crime due to joblessness and a host of other social issues.



"While $134B flows in each year, predominantly in the form of loans, foreign investment and aid; $192B is taken out, mainly in profits made by foreign aid.

4. Population growth

3

The African continent has some of the highest averages for fertility rates and population growth in the world. The statistics alone paint quite a huge scale of challenge now and years to come. While the average world fertility rate is 2.5 children per woman, in Africa it is 4.7 children per woman. The current population of the continent is 1.2 billion people up from just under half a million people in 1980. The UN projects that by 2050 the annual growth increases of the continent will by 42 million people every year and the total population of the continent will have doubled. As growth rates in the rest of the world decrease Africa will contribute 54% of the overall world population growth by 2050.

While the population growth points to recent medical advancements and improved conditions to increase life expectancy and lower infant mortality, the challenge is meeting the needs of this population explosion. While family planning programs in many parts of the world led to a fall in fertility rates, in Africa this has not happened and even where gains were made they are at risk of being reversed.

With no effective solutions for family planning and not sufficient planning by the government to mitigate and plan for the explosions countries will be thrown in the vicious cycle that comes with the pressure many people place on limited resources.

5. Insecurity

Insecurity is rampant across Africa hindering progress at national and regional levels. From the urban crime to terrorist groups like Al-Shaabab and Boko-Haram to civil wars in South Sudan and political instability in Libya and Somalia, the examples are unending. The insecurities affect all factors of production, cause massive displacement of people, loss of investments, lives and also scare away direct foreign investment. It also

6. Droughts and Famine

Weather patterns continue to be a challenge to the continent which is yet to fully realize its agricultural potential. Pro-longed drought periods result in people displacement and deplete grain reserves and loss of livelihoods for a great number of people in the continent especially along the horn of Africa. It takes countries steps back in development and affect the ability of future generations to battle from a malnourished childhood to better living standards as adults especially with they become cyclic.

East African Governments to Blame for Region's Food Crisis

The East African region is facing one of the worst droughts in the recent past. Millions are facing starvation and thousands of lives hang in the balance.

None of Africa's problems is beyond the means and resources within the continent. What has largely lacked is the proper policy making and implementation from the political class down to the civil service in the countries. These are problems that can be solved and mitigated by proper governance which remains the single biggest challenge the continent faces.

Child Abuse

Physical abuse and neglect and Psychological maltreatment.

PHYSICAL ABUSE AND NEGLECT

Child abuse and neglect is a social problem faced by individuals and societies around the world; however, few works exist that compare this problem across national boundaries. The International Society for the Prevention of Child Abuse and Neglect (IPSCAN) is an international organization focused on prevention and treatment issues associated with child abuse and neglect, and provides researchers in a number of disciplines with the opportunity to communicate about global issues of child abuse. One forum for this communication is *Child Abuse and Neglect: The International Journal.* One text, *Child Abuse: A Global Perspective,* by Beth Schwartz-Kenney, Michelle McCauley, and Michelle Epstein (2001), takes an extensive global view of all areas of child abuse among sixteen countries worldwide. This comparative perspective describes the nature of child abuse within each country and the countries' responses to abuse with regard to prevention and treatment.

Defining Child Physical Abuse and Neglect

The definition of abuse and neglect is difficult to determine even within a particular country. For example, Joaquín De Paúl and Olaya González (2001) note that before 1987 professionals in Spain could not reach an agreement concerning how one should classify child maltreatment cases: There was no commonly used definition of child abuse and neglect. Given the many cultural and societal influences affecting the way in which a country defines abuse, defining abuse globally is obviously a formidable task, although definitions of abuse and neglect do contain commonalities across countries. Child maltreatment includes both the abuse and neglect of a child, two different types of problems with slightly different causes, perpetrators, and outcomes. Furthermore, abuse occurs in a number of different forms including physical abuse, psychological maltreatment, and sexual abuse. These categorizations of abuse are fairly common across cultures.

Physical abuse often is described as a situation in which a child sustains injury due to the willful acts of an adult. This type of abuse can be defined very loosely, where abuse is defined as the illtreatment of children. However, the definition may be as specific as stating that the injuries are inflicted by particular acts such as hitting, biting, kicking, or slapping; and/or occur through the use of objects such as belts, sticks, rods, or bats. These more specific definitions are usually the result of laws created to protect children. For instance in Spain the 21/87 Act improved the consistency of definitions used throughout the country in identifying child abuse (De Paúl and González 2001). In Israel in 1989 an amendment was passed known as the Law for the Prevention of Abuse of Minors and the Helpless. Specific types of abuse were defined within this amendment, creating a more definitive classification of each type of abuse in Israel (Cohen 2001). In many countries, the definition

of physical abuse involves the presence of a physical mark created by intentional physical contact by an adult. One advantage of clear definitions is that they result in a more accurate reporting of physical abuse to authorities (Kasim 2001).

Physical abuse can also be a result of parental and/or school discipline in which a child is punished by beating or other forms of corporal punishment. It should be noted, however, that there are large cultural differences in the interpretation of corporal punishment as abuse. Many Western countries classify corporal punishment of any kind as physical abuse, although this is not true for the United States or Canada. In fact, twenty-three U.S. states allow corporal punishment in the public schoolsystem (National Coalition to Abolish Corporal Punishment in Schools 2001). Corporal punishment of children is also accepted in other countries. In Sri Lanka, caning a child is still a permitted form of punishment in government schools, and parents and teachers believe they have the right to impose corporal punishment (de Silva 2001). This is also the case in Kenya, where physical punishment is an acceptable way of disciplining children (Onyango and Kattambo 2001). In Romania 96 percent of the population are comfortable with beating a child as a form of discipline and do not feel that this beating would have any negative impact on the child's development (Muntean and Roth 2001). In India, Uma Segal (1995) examined the incidence of physical abuse defined as "discipline." Her results indicate that 57.9 percent of parents stated that they had engaged in "normal" corporal punishment, 41 percent in "abusive" discipline, and 2.9 percent in "extreme" discipline.

Physical abuse also includes acts of *exploitation.* This type of physical abuse is prevalent in a number of countries such as Sri Lanka, the Philippines, and Thailand where sexual exploitation of children is well documented (de Silva 2001). Exploitation is also seen in the form of child labor in a number of countries, such as India (Segal 2001), and in the conscription into the military of children in Sri Lanka (de Silva 2001). Finally, one less common form of psychical abuse results when a caretaker fabricates a child's illness, known as *Munchausen Syndrome by Proxy.* The pattern of events accompanying this syndrome often results in physical injury to the child (Wiehe 1996). Munchausen Syndrome by Proxy has been identified in a number of different countries (Schwartz-Kenney, Mc-Cauley, and Epstein 2001).

In the United States, following C. Henry Kempe and his colleagues' (1962) identification of *battered-child syndrome,* physical abuse was identified more objectively through the use of medical definitions. The Child Abuse Prevention and Treatment Act of 1974 led to a federal definition of child abuse and neglect. This Act provided definitions for all types of abuse and led to greater public awareness and response to problems associated to child maltreatment. This federal definition was changed in 1996 by the U.S. Congress. Child abuse and neglect in the United States is now defined as ". . . any recent act or failure to act on the part of a parent or caretaker, which results in the death, serious physical or emotional harm, sexual abuse or exploitation, or an act or failure to act which present an imminent risk of serious harm" (42 U.S.C. §5106g[2] [1999]). This change gave greater discretion to the states, allowing each state to define abuse more broadly.

Child neglect also can take on a number of different forms. For instance a child's nutritional needs can be ignored, resulting in a deficient diet and, in turn, a "failure to

thrive." This *nutritional neglect* is not necessarily intentional and may result from a parent's lack of knowledge regarding a healthy diet or from poverty. *Physical neglect* results when a child is not provided with adequate food, shelter, and clothing. Neglect can also come in the form of inadequate medical care, lack of proper supervision, and lack of educational opportunities. Finally, neglect also includes inadequate emotional care, where a child experiences a continuous lack of response to his or her crying or any other behavior in need of a response.

The type of neglect experienced by children is dependent upon the culture in which one lives. For instance, in India one problem still faced by many young women is *child marriage*. Due to extreme poverty, many girls are perceived as a financial burden to their families and are in turn forced to marry in exchange for money. In some cases, young women are sold to brothels. As Segal (2001) notes, under both circumstances these children are inevitably physically abused.

A very distinct type of neglect occurs in Japan, where coin-operated lockers have been a part of the problem. For years, unwanted children were placed in these lockers and, in many cases, died when not found in time. This became a serious social problem in the mid-1970s. According to Akihisa Kouno and Charles Felzen Johnson (1995), approximately 7 percent of infanticides in Japan during this period were of coin-operated locker babies. Since that time, this type of neglect has dropped dramatically due to an increase in locker inspection and relocation and to educational programs on contraception.

Abuse and neglect in Romania often takes the form of child abandonment, believed to be due to poverty, lack of education, and lack of assistance to families in need (Muntean and Roth 2001). Additional abuse and neglect takes place within the family given the existing living conditions. Ana Muntean and Maria Roth state that the "emotional, physical, and even sexual abuse is quite frequent within the Romanian-family system, as well as neglect" (p. 185).

Differences in prevalence of particular subtypes of abuse are therefore evident when examining child maltreatment from an international perspective. Although evidence of abuse can be found in all countries, how abuse is defined, prevented, and treated is often determined by social agencies such as the U.S. Department of Health. The definition itself is dependent upon the national boundaries in which the agency exists. One common thread within the prevalence data in most countries is that the individuals responsible for collecting these data often state that it is likely that the numbers underestimate the degree of child abuse due to the underreporting of incidents to legal authorities (Schwartz-Kenney, McCauley, and Epstein 2001).

Prevalence of Abuse and Neglect

Internationally, child abuse is more common than previously acknowledged. Historically, it was hard for many to believe that parents or caregivers would intentionally inflict harm towards their children. Thus, in many countries child abuse and neglect were often ignored or denied as a result of people's acceptance of violence in a given culture or due to their belief that the culture must focus on preserving the family (Schwartz-Kenney, Mc-Cauley,

and Epstein 2001). Some cultures simply denied that child neglect or abuse occurred. For example, Mohd Sham Kasim (2001) states that in Malaysia the problem of abuse was at one time believed to be a problem only for Western cultures. This stemmed from the idea that the strong family ties and assistance from the extended family prevalent in Malaysia prevented the problem from occurring.

Internationally, it has always been the case that the culture had to acknowledge the problem of neglect and abuse before national organizations concerned with prevention and treatment could be created. Unfortunately, it took many years (often decades) before many societies recognized it as a problem worthy of governmental resources. As mentioned above, the noted physician C. Henry Kempe dramatically increased many countries' public awareness regarding the abuse and neglect of children in his lectures on the battered-child syndrome (Kempe et al. 1962).

The prevalence of each type of maltreatment is a question that can be answered in some countries but not others. For example, this type of data is available in the United States, Australia, Malaysia, and Ireland. Other countries, such as Canada, are studying this question, whereas others, such as Mexico and Romania, are grappling with how to identify children in need rather than placing their resources in the assessment of prevalence rates for each type of abuse. When comparing countries in which the numbers are available, it is evident that there are differences with regard to the prevalence of each type of abuse. For instance, in Australia, 31 percent of reports were of emotional abuse, 28 percent included physical abuse, 16 percent consisted of sexual abuse, and 24 percent represented neglect (Hatty and Hatty 2001). This is compared to the prevalence reports in Ireland, where 34 percent of reports involved sexual abuse, 8 percent included emotional abuse, 11 percent were identified as physical abuse, and 47 percent were of neglect (Ferguson 2001). In the United States, the Child Protective Services (CPS) state that neglect is the most prevalent type of maltreatment, accounting for 45 percent of all reports, followed by physical abuse in 25 percent of cases, sexual abuse in 16 percent of cases, and finally psychological abuse in 6 percent of all reports (Briere et al. 1996).

Thus, cultural differences significantly influence the way in which forms of abuse are defined and in turn the prevalence rates that result. Given differences in defining abuse, it is not surprising that the prevalence numbers such as those reported above differ dramatically from one country to the next. For instance, as Kouno and Johnson (2001) indicate, "the disparity between prevalence rates of report abuse cases in the United States and Japan may be the result of differences in lifestyle and reporting laws between Western countries and Japan" (pp. 102–103). Comparing abuse from one country to the next is a difficult task given the differences in definition, lifestyle, and legal system. In all cases, authorities believe the prevalence rates represent approximately one-third of all cases of child abuse because these statistics are based only on reported cases and therefore ignore the remaining two-thirds of all occurrences of maltreatment. With the introduction of mandatory reporting laws in numerous countries, however, these numbers are rising. In addition, an increase in public awareness of the problem of abuse and neglect directly relates to an increase in reporting of abuse to authorities.

Perpetrators and Families in which Neglect Occurs

Who is more likely to neglect a child? Researchers have examined the characteristics of families often associated with neglect. One finding is that the perpetrator of neglect in the United States and other Western countries is likely to be female (Ferguson 2001; Juvenile Justice Bulletin 1999). This may be a function of the fact that neglect is more likely to occur in single-parent families and homes in which the mother is young. Children born to women under the age of twenty in the United States are 3.5 times more likely to experience neglect and abuse than children born to older mothers (Lee and Goerge 1999). In addition, neglect occurs more often in families with mothers who are childlike in nature—for instance, those who are more dependent on others, act more impulsively, cannot assume responsibility for themselves or others, and show poor judgment. These mothers often receive very little social support, were neglected as children themselves, have higher rates of depression than the overall population, experience high degrees of stress, and were part of families that lived in environments that did not provide adequate mental and health services or educational facilities (Wiehe 1996). Domestic abuse has also been found related to maternal neglect in Western countries such as Ireland (Ferguson 2001) and the United States (Briere et al. 1996). Researchers have also found that children born to substance abusers are more likely to experience neglect and injury compared to children of non-substance abusers (Bijur et al. 1992). Concerning family factors, children of neglect were most often from families living in poverty, families without a father present (Ferguson 2001; Polansky et al. 1981) or with an unemployed male adult (Hawkins and Dunkin 1985), families with four or more children (Juvenile Justice Bulletin 1999), and families in which the interaction between the children and adults was primarily negative (Wiehe 1996). All of these factors often lead to a parent's inability to adequately parent, resulting in neglect of one form or another.

Perpetrators and Families in which Physical Abuse Occurs

Researchers have identified a number of factors associated with the physical abuse of a child, such as the characteristics of individuals who abuse and the characteristics of families in which child abuse occurs. In the United States less than 10 percent of child abuse is committed by non-family members (Juvenile Justice Bulletin 1999). Obviously, the non-family abuse rate may be higher in countries such as Sri Lanka where conscription into the military and child prostitution are greater problems (de Silva 2001). In addition, in the United States only 3 percent of child maltreatment occurs at day care facilities or other institutions (Prevent Child Abuse America 1997). This rate may be higher in countries such as Romania (Muntean and Roth 2001) and Russia where institutional abuse of children has been identified as a serious problem (Berrien, Safonova, and Tsimbal 2001).

In general, there are a number of individual perpetrator differences that predict abuse in the West. For instance, individuals who were abused as children are believed to be more at risk to become abusers as adults (Straus, Gelles, and Steinmetz 1980). Physical abuse is also more likely to occur in family situations in which parental knowledge of parenting skills is inadequate, when high levels of stress are present, when parents are very young, when parental expectations are too high regarding a child's behaviors, when substance abuse is present, and/or when adults in the family have low levels of empathy towards a child (Kolko 1996). Abuse is found more often in families with female children (Sedlack and

Broadhurst 1996) and in families with four or more children (Juvenile Justice Bulletin 1999). Finally factors such as economic distress, lack of social support, and cultural or religious values have been linked to incidences of physical abuse in most countries that have addressed this problem (Schwartz-Kenney, McCauley, and Epstein 2001).

Effects of Abuse and Neglect: Long-Term and Short-Term Effects

There is little cross-cultural data on differences in harm to victims of child neglect and abuse in different countries. However, when one looks at studies from different countries there are a number of similarities. In general, empirical studies indicate that various forms of child maltreatment negatively affect the victim's development physically, intellectually, and psychosocially (Kempe and Kempe 1978; Mullen et al. 1993). Child victims of neglect and/or abuse are 1.75 times more likely to experience *posttraumatic stress disorder* as adults compared to individuals who did not experience neglect and/or abuse (Widom 1999). In addition, child victims are more likely to experience depression, attachment difficulties, and low self-esteem (Kolko 1996). A Canadian study found that a history of child abuse was one of the leading predictors of psychological problems in adulthood (Mian, Bala, and MacMillan 2001). Many studies also indicate the long-term effects of maltreatment given the carry-over from one generation to the next (Zuravin et al. 1996).

Furthermore, there are particular risks and harm associated with certain types of abuse, which are more prevalent in certain countries. For example, in addition to the negative outcomes discussed above, conscription into the military carries with it the risk of physical injury or death. Being forced to work as a prostitute significantly increases the chance of becoming infected with HIV or other sexually transmitted diseases. In India, which has a very high rate of child labor, children are often forced to work in dangerous conditions at exhausting hours (Segal 2001).

Finally, in addition to the harm of neglect and abuse to the individual child, there is also a broader harm or cost to society as a whole. Researchers have established a link between experiencing neglect and abuse as a child and engaging in illegal and delinquent behaviors as a teenager and adult (Widom 2001).

Cultural Differences

One must take into account the vast cross-cultural differences that exist when defining any type of child maltreatment. By examining comparative data from a diverse group of cultures, perhaps cultural factors and social structures can be identified to help us gain a better understanding of factors that contribute to abuse and factors that might assist in effectively preventing abuse. Simple definitions of child abuse and neglect do not exist, although there are a number of similarities in definitions even across cultures. Regardless of the differences in how abuse is defined, the number of reports of abuse has risen dramatically in the last decade without the needed growth in staff to respond to this increase in reports. This clearly indicates the need for greater prevention, resources dedicated to staffing, and effective treatment of this worldwide social problem.

FOREIGN AID

10

Tied Versus Untied Foreign Aid: Consequences for a Growing Economy

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Abstract This paper contrasts the effects of tied and untied foreign aid programs on the welfare and macroeconomic performance of a small open economy. We show that the acceptance of tied aid inevitably obligates the recipient economy to undertake certain internal structural adjustments, and the flexibility it possesses to undertake these adjustments eventually determines the effectiveness of the aid program. The economic consequences of tied and untied aid programs, their relative merits from a welfare standpoint, and the transitional dynamics depend crucially upon several characteristics of the recipient economy that summarize this flexibility. These include: (i) the costs of installing public capital relative to private capital (intertemporal adjustment costs), (ii) the substitutability between factors of production (intratemporal adjustment costs), (iii) the flexibility of labor supply (work effort), (iv) the recipient's degree of access to the world financial markets (capital market imperfections), and (v) the recipient's opportunities for co-financing infrastructure projects by domestic resources. November 2003

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1 1. Introduction Official development assistance, in the form of foreign aid or unilateral capital transfers, represents an important channel through which wealth is transferred from rich, developed nations to poorer, underdeveloped economies. Both the magnitude and the scope of these international transfers have increased significantly over the last four decades. For example, total flows of official development assistance from members of the OECD and OPEC countries have increased from about $6 million in 1965 to over $59 million in 1999. By that time these funds represented between 3-5 percent of the Gross National Income of the recipient low and middle income countries, and financed between 10-20 percent of their gross capital formation.[1] One issue of concern for both donors and recipients is how foreign aid should be spent in an economy with scarce resources. Guided either by self-interest, or to prevent the possibility of mismanagement of external funds, donor countries often impose restrictions on how such aid can be used by the recipient. This has given rise to a long-standing debate, both in academic and policy circles, as to whether international transfers should be "tied" ("productive") or "untied" ("pure"). As Bhagwati (1967) points out, tied external assistance can take several forms. It may be linked to a (i) specific investment project, (ii) specific commodity or service, or (iii) procurement in a specific country. Recent studies by the World Bank, however, point out that over time, a larger proportion of foreign aid has become "untied" with respect to requirements for procuring goods and services from the donor country, but it has become more "tied" in the sense of being linked to investments in public infrastructure projects (telecommunications, energy, transport, water services, etc). For example, between 1994 and 1999, the proportion of official development assistance that was "untied" in the sense of not being subject to restrictions by donors on procurement sources rose from 66 percent to about 84 percent. At the same time, between two-thirds and three-fourths of official development assistance was either fully or partially tied to public infrastructure projects (see footnote 1). A recent example is the European Union's assistance programs, both to its member nations as well as aspiring members. These programs tied the flow of aid to the accumulation of

1 World Bank (1994, 2001).

2 public capital, and were aimed at building up infrastructure in the recipient nation, thereby enabling it to attain a strong positive short-run growth differential relative to the EU average, achieve higher and sustainable living standards in alignment with EU standards, and

10

ultimately gain accession to EU membership.[2]The move toward tying more aid to public investment has been dictated mainly by the growing infrastructure requirements of developing countries. Most economists agree that investment in public infrastructure raises the productivity and efficiency of the private sector and, as a consequence, provides a crucial channel for economic growth, development, and higher living standards.[3] But financing the required investment in infrastructure has proven to be a challenging task for developing countries. Most such countries have significantly restricted public sector borrowing after the debt-crisis of the early 1980s, while at the same time their infrastructure requirements have increased steadily. A 1994 World Bank study has estimated these requirements to be $200 billion a year. Facing binding fiscal constraints, governments in developing countries have turned to external financing, in the form of tied unilateral capital transfers, as a significant source of financing public investment. This paper analyzes the consequences of such tied external assistance programs for the growth and macroeconomic performance of a developing economy. Is tied foreign aid always beneficial for the recipient economy? To answer this question, one must acknowledge the fact that the acceptance of a tied transfer by the recipient inevitably obligates it to undertake some internal structural adjustments, and the flexibility it has to do this will determine the effectiveness (or otherwise) of the aid program. Thus the consequences of tied versus untied aid on the growth path of the economy, and their relative merits from a welfare standpoint, depend crucially upon a number of key structural characteristics that summarize this flexibility. These characteristics include: (i) the costs associated with installing the publicly provided capital

[2] Greece, Ireland, Spain, and Portugal received unilateral capital transfers tied to public investment projects under the Structural Funds Program between 1989-1999. A similar tied transfer program, called Agenda 2000, has been initiated for eleven aspiring member nations (Central Eastern European Countries), and is expected to continue until 2006.

[3] Theoretical and empirical interest in the impact of public capital on private capital accumulation and economic growth originated with the work of Arrow and Kurz (1970) and more recently with Aschauer (1989a, 1989b). Most of this literature has focused on closed economies, using both the Ramsey model and the AK endogenous growth framework; see e.g. Futagami, Morita, and Shibata (1993), Baxter and King (1993), Fisher and Turnovsky (1998). Turnovsky (1997) extends Futagami et. al. to a small open economy and introduces various forms of distortionary taxation, as well as the possibility of both external and internal debt financing. Devarajan, Xie, and Zou (1998) address the issue of whether public capital should be provided through taxation or through granting subsidies to private providers.

(intertemporal adjustment costs), (ii) the substitutability between public and private capital in production (intratemporal adjustment costs), (iii) the degree of access to the world financial market (financial adjustment costs), and (iv) the opportunities for co-financing infrastructure projects by domestic resources, like the domestic government or private sector.[4]These issues have been analyzed in the context of an endogenous growth model by Chatterjee, Sakoulis, and Turnovsky (2003), and Chatterjee and Turnovsky (2003). But these papers share one crucial restriction, namely that labor supply in the recipient economy is fixed inelastically. This paper redresses this shortcoming by introducing endogenously supplied labor. We show that since labor is also a (variable) factor of production like the two types of capital, the potential for substitution along the labor margin is also important in determining the dynamic effects of untied aid, and adds a further dimension to the debate on whether or not aid should be tied. Just as the endogeneity of labor supply has proven to be crucial in determining the nature of the economy's dynamic response to demand shocks in other contexts, introducing flexible labor supply is important in determining the dynamic

response to an untied foreign aid shock, thus providing new insights into the contrasting responses to tied and untied foreign aid shocks.[5]To capture the issues we wish to address, the model has a number of key characteristics. First, the production conditions are sufficiently flexible to accommodate both intratemporal and intertemporal factor substitution. We specify the former by assuming that labor interacts with public capital to yield "labor efficiency units", which then interact with private capital in accordance with a constant elasticity of substitution (CES) production function. Intertemporal substitution is captured by assuming that new investment in both types of capital involves convex installation costs. Indeed, the impact of foreign aid on the evolution of the economy depends not only on the short-run degree of factor substitutability, but also on the relative costs of adjustment of the two types of capital. In the case of tied aid, the assistance is linked to the accumulation of public capital, and thus [4] It is entirely plausible that the large financial needs of developing countries for infrastructure investment will not be met by the flow of external assistance, and hence domestic co-financing assumes a lot of significance. Recently, in a panel study of 56 developing countries and six four-year periods (1970-93), Burnside and Dollar (2000) find that foreign aid is most effective when combined with a good policy environment in the recipient economy. Previously, Gang and Khan (1990) report that most bilateral aid for public investment in LDCs is tied, and is given on the condition that the recipient government devotes certain resources to the same project. [5]In the Ramsey model, for example, an increase in government consumption expenditure causes immediate crowding out of private consumption, when labor supply is fixed; otherwise it leads to transitional dynamics; see Turnovsky (2000).

4 provides an important stimulus for private capital accumulation and growth. We assume further that public investment in infrastructure is financed both by the domestic government as well as via the flow of international transfers, thereby incorporating the important element of domestic co-financing, characteristic of the European Union's and other bilateral aid programs that are tied to specific public investment projects. In both cases, the transfers are assumed to be linked to the scale of the recipient economy and therefore are consistent with maintaining an equilibrium of sustained (endogenous) growth. The model is sufficiently general to include the possibility of a third source of financing public infrastructure, namely the private sector of the economy. By taxing private firms, and spending a fixed proportion of those taxes in financing new infrastructure, the government can ensure the private sector's participation in building up the economy's stock of infrastructure.[6]We also assume that the small open economy faces restricted access to the world capital market in the form of an upward-sloping supply curve of debt, according to which the country's cost of borrowing depends upon its debt position, relative to its capital stock, the latter serving as a measure of its debt-servicing capability. This assumption is motivated by the large debt burdens of most developing countries, which give rise to the potential risk of default on international borrowing. Indeed, evidence suggesting that more indebted economies pay a premium on their loans from international capital markets to insure against default risk has been provided by Edwards (1984). Thus, the paper extends and contributes to the literature on foreign aid and macroeconomic performance in several important directions. First, it analyzes the role of tied development assistance as a mode of financing public investment and its effect on the transitional adjustment path and its sensitivity to the structural conditions of a growing open economy. Second, by relaxing the assumption of inelastic labor supply, it provides new insights into how the representative agents' incentive to choose between work and leisure responds to tied and untied aid shocks, and how, in turn, that response impacts on the macroeconomic evolution of the economy, both in the short run as well as over time. Third,

since it is likely that external assistance and borrowing will not meet the total financial needs for public investment, domestic participation by both the government and the 6 The efficient use of infrastructure is a further important issue. For example, Hulten (1996) shows that inefficient use of infrastructure accounts for more than 40 percent of the growth differential between high and low growth countries.

5 private sector is also important. This paper specifically characterizes the consequences of domestic co-financing of public investment and outlines the trade-offs faced by a recipient government when it responds to a flow of external assistance from abroad. Finally, the question we address is also closely related to the "transfer problem", one of the classic issues in international economics, dating back to Keynes (1929) and Ohlin (1929). This early literature was concerned with "pure" transfers, which could be in the form of an unrestricted gift or as debt-relief. By contrast, our analysis focuses on "productive" transfers, the use of which is tied to public investment. The formulation we develop parameterizes the transfer so that we can conveniently identify the pure transfer and the productive transfer as polar cases.7Given the complexity of the model, most of the analysis is conducted numerically. The main results of our analysis are the following. The effects of foreign aid depend critically on whether it is tied or untied. Chatterjee et al. (2003) and Chatterjee and Turnovsky (2003) show that when labor supply is inelastic, even though a tied aid shock generates a dynamic adjustment, an untied aid shock has no dynamic consequences for the recipient economy, and leads only to instantaneous increases in consumption and welfare. In contrast, we show that allowing the agent to adjust his work effort leads to fundamental differences in the economy's response. Under the assumption of flexible labor supply, both types of aid generate dynamic responses, albeit dramatically different in nature. In the case of untied aid, they occur primarily through the labor-leisure choice and the effect this has on the marginal rate of substitution between consumption and leisure and on the real wage rate. For plausible parameters, the economy's dynamic adjustment occurs rapidly with little effect on the stocks of capital. However, although the economy's current account and welfare improve in the long run, the reduced work effort and higher consumption leads to a decline in the equilibrium growth rate. On the other hand, an aid program that is tied to investment in public capital generates a much more gradual dynamic adjustment, one that is exactly opposite in nature to that following an untied aid program. There are significant trade-offs in welfare between the short run and the long run, as the agent increases his work effort and initially substitutes away from consumption toward 7Much of the discussion of the transfer problem (untied aid) focuses on the welfare effects, doing so in a static framework. A recent paper by Djajic, Lahiri, and Raimondos-Møller (1999) analyzes the welfare effects of temporary untied foreign aid in a two country-two period model.

6 investment. The benefits of this substitution are realized only gradually over time, as the investment in public capital enhances productivity in the recipient economy and thereby increases consumption. The implied long-run changes in the relative capital stocks in the recipient economy are dramatic. The magnitude and the direction of the transitional dynamics and long-run effects depend crucially upon the elasticity of substitution between the two types of capital in the recipient economy. Our analysis suggests that tied aid is more effective in terms of its impact on long-run growth and welfare for countries that have low substitutability between factors of production. This finding has important policy

implications, especially in light of recent empirical evidence suggesting that the elasticities of substitution for less developed or poor countries are significantly below unity.[8] We find that the welfare gains from a particular type of aid program (tied or untied) are sensitive to the costs of installing public capital and capital market imperfections, even for small changes in the degree of substitutability between inputs. Economies in which the elasticity of substitution between the two types of capital and the installation costs are relatively high are likely to find tied transfers to be welfare-deteriorating. For such economies untied aid will be more appropriate. The remainder of the paper is structured as follows. Section 2 sets out the analytical structure and summarizes the macrodynamic equilibrium. Section 3 conducts numerical simulations and considers their implications, while Section 4 performs substantial sensitivity analysis. Section 5 briefly addresses the issue of co-financing, while Section 6 concludes and provides some policy advice