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Editorial Note

As Chief Editor, I am pleased to introduce this open access interdisciplinary Journal on issues related to sustainable development in Africa. IJAD is an outcome of successful international conferences on African Development since 2001. The journal aims to serve as a scholarly forum for dialogue, research and knowledge necessary for policy reforms to enhance sustainable development, good governance and human rights and peace in African states with implications for other developing states. Since good governance is a critical cross-cutting concept, the journal solicits papers with a focus on good governance, though it welcomes submissions in all other themes. Governance has political, economic, institutional, and leadership dimensions. Governance is defined as the institutions or rules by which political authority is exercised, including how governments at all levels are selected and monitored, and their capacity to effectively formulate and implement policies that provide public services for citizens. Development is multidimensional process involving economic development, advancement of human capabilities, environmental and human security, a richer cultural life and greater political and social freedom. I am pleased to introduce the first issue of six papers. The papers focus on the political economy of poverty reduction, the need for interdisciplinary research to address transnational challenges, whether foreign aid and investment promote good governance, the political dilemma of failed governance, and the sustainability of an African airline.

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My title "An Ethiopian Dilemma" stands to evoke an association to the book by Swedish sociologist Gunnar Myrdal, *An American Dilemma*, which played a signal role in helping Americans resolve their longstanding conflict of values regarding racial discrimination. My hope is to suggest ways in which a social scientist might help Ethiopians get a better grip on their country's problems.

Although work by social scientists gets valued often for methods of securing more reliable data, there are three other ways in which our disciplines provide more objective analyses. One is to locate current issues in a historical context. One is to bring to bear sharper theoretical tools. And one is to undertake comparative analyses. Here I shall offer suggestions in all three modes.

First, to history, not since the 16th Century has Ethiopia experienced changes so convulsive as in the past fifty years. The 16th-century changes were instigated by the Ottoman Empire under Sultan Suleiman, who gave arms and soldiers to the satellite state Adal under Ahmad Grañ. Grañ assassinated the rightful Harari ruler Sultan Abu Beker Mohammed and abrogated the Islamic doctrine that Ethiopia was a righteous land to be spared jihad. His attacks destroyed vast stretches of highland Ethiopia and created a vacuum that invited Oromo peoples to conquer vast parts of the country, initiating the chronically contested multiethnic rulership of the Ethiopian state. Turks later invaded Ethiopia directly and wrested away Ethiopia’s historic coastal strip, paving the way for conflict three centuries later.

20th century turbulence likewise stemmed from invasions: first Sudan, then Italy, twice. These invasions pushed Ethiopia toward deliberate programs of internal change, what sociologists call "defensive modernization." One way or another, however, a push toward modernization was inevitable, given steady engulfment by a global civilization. What was not inevitable was how Ethiopia faced the challenges of becoming modern.

**Parameters of Modernization**

When we think about roads to modernity we often invoke the trope of revolution. We link the modern world with the revolutions in America and France, Russia and China—what Eisenstadt (2006) calls the “Great ‘Classical’ Revolutions.” Or we think of generic transformations that use the same label—the Industrial Revolution and the Democratic Revolution. Social scientists may associate to phrases recognized from the work of penetrating originary theorists, terms such as the Managerial Revolution (Burnham, 1941), the Integrative Revolution (Geertz, 1963), the Academic Revolution (Jencks and Riesman, 1969), the Participatory Revolution (Huntington, 1974), and the Disciplinary Revolution (Gorski, 1993).

Whatever ‘revolution’ is taken to signify, the term connotes *changes of form that combine abruptness and violence*. We tend to suppose that modernization requires societies to suffer a set of wrenching events, in which one complex of deep structures must necessarily be eradicated in favor of another. Lenin’s famous phrase puts the matter with crude succinctness: “You can’t make an omelet without breaking a few eggs.” But surely the subject demands a more differentiating perspective.

I approach this theme from a lifetime of study of the seminal figures of modern social science, each of whom penetrated a central feature of the modern order. Some analyze modernity in terms of the division of labor, specialization, and increased productivity (Smith, Marx, Durkheim); some consider political centralization, mobilization, and nation building (Tocqueville, Elias); some stress equality and the extension of rights (Hegel, Tocqueville, von Stein). Others stress objectified knowledge and scientifically educated elites (Comte, Weber, Dewey) or the creation of world-shaping ideologies (Pareto, Eisenstadt); still others highlight changes in persons, for example, as becoming more disciplined (Weber, Freud, Elias) or more
individuated (Durkheim, Simmel) or more flexible (Simmel, Riesman, Lerner). My recent work seeks dialogue among these authors by connecting the phenomena they discuss in terms of six major categories: specialization, individualization, social equalization, political unification, cultural rationalization, and personal discipline. I have also sought to specify the costs and dissatisfactions associated with modernization as well as its benefits (Levine 2005, 2006c) (Table 1).

<table>
<thead>
<tr>
<th>PROCESS</th>
<th>Differentiation</th>
<th>Democratization</th>
<th>Rationalization</th>
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<tr>
<td></td>
<td>Specialization</td>
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<td>REVOLUTION</td>
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<td>BENEFITS</td>
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<td>Freedom</td>
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</tr>
<tr>
<td>DISADVANTAGES</td>
<td>Personal atrophy; Social deficits</td>
<td>Hyper-specialization; Alienation; Consumerism</td>
<td>Repressive centralization; Violence</td>
</tr>
</tbody>
</table>

Table 1. Modernity revolutions and their effects (Levine 2006c, 26)

Although the transformations analyzed by these authors often seem to occur suddenly I prefer to view them as the acceleration, albeit occasionally at breakneck speed, of large-scale processes that evolved over centuries. As Donald Donham suggests in his perspicuous account of modernization among the Maale of Debub Kilil, regarding "the question of modernity . . . a long, vernacular conversation has gone on for centuries among ordinary men and women the world over" (1999, 180). But whether or not those rapidly unfolding processes entail abruptness of change is a variable, not an inexorable feature of the dynamics of modernization, a central assumption behind Wax and Gold (1965).

So is the question of whether or not modernization necessarily entails violence. Although “revolutionary” ideologies tend to rationalize–idealize, even the use of violence in producing certain changes associated with the modern order, it has never been demonstrated that these changes could not have come about in nonviolent ways. Indeed, one of the great theorists of modernity, Alexis de Tocqueville, demonstrated that after all the bloodletting of the French revolution, what emerged was essentially a set of changes that already in place under the ancien regime ([1856] 1955).

We would do well, then, to conceptualize modernization in ways that accommodate variations in whether, how, and how well the challenge to make certain modernizing changes is

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1 In contrast to earlier epochs, these processes have often been greeted with enthusiasm for the sheer fact of their novelty, whereas the word ‘modern,’ historians of ideas tell us, had previously evoked negative associations.

2 Even more challenging to the notion that modernization requires abrupt, violent shifts from one state to another, I would stress, as did Max Weber and Georg Simmel preeminently, that the diverse currents of the modernization process do not all flow in the same direction. Although at times they support one another—as in Weber’s famous argument that the modern commercial order requires the institutions of a stable legal system—at times they also run counter to one another. This can be seen, for example, in Weber’s implication that bureaucrats’ obligation to “follow the rules” contradicts the wish to achieve goals in the most efficient matter; in Simmel’s analysis of the contradiction between the modern promotion of individuality and precisely its opposite, the need to conform to objectified structures; or in Luhmann’s argument that different institutions of the modern world carry opposing values and languages.
met. To deal with this variable, I propose now the notion of *structural opening*—a moment of fluidity in which actors imagine and deal with the array of options that every situation presents. Every opening harbors possibilities for change and action that are more or less constructive, more or less beneficial. It requires disinterested analysis to identify and clarify the options available in a situation, in order to enable actors to transcend the inertia and passions of the moment and thereby avert possibly disastrous results.

Within this perspective I shall review openings for Ethiopia that appeared over the past half century, openings which in each case found key players moving in suboptimal directions. I reflect upon five such opportunities that arguably were mishandled, as these became manifest in (1) the abortive coup of December 1960; (2) the ferment of 1974; (3) the regime change of 1991; (4) the Eritrean war of 1998; and (5) the May 2005 national election.

**Base Line 1957.** It must be hard for Ethiopians today to grasp the confidence about Ethiopia’s future that prevailed in 1957. Half a century ago, one could imagine that Ethiopia’s future would be benign. Consider what had been accomplished. Regional warlords had given way to a standing national army trained to handle modern technology. Central ministries dealt with justice and tax collection. The slave trade was ended (1923!). Customs barriers impeding the flow of domestic trade were removed. Ethiopia had a written constitution, a fledgling national parliament, a central bank, and a national currency. The country had built networks of schools and medical facilities; industrial plants in textiles, cement, sugar, and electric power; and modern media of transport and communication. The modernizing sector pulsated with the energies of foreign-educated young people and graduates of Ethiopia’s new colleges. Things appeared so good that by 1960, when the march of African colonies toward independence raised concerns about their viability, it seemed that Ethiopia, thanks to its long history, might offer a model, averting the internal conflicts that threatened so many of the new states.

Ensuing decades dimmed such hope. The December 1960 coup attempt valorized a pattern of murder to effect social change, and cost an opportunity to move toward consensual liberalization. The Derg takeover of 1974 escalated violence against dissident domestic groups, and against Eritrea, and reversed promising lines of economic development. The regime change of 1991 was met with an escalation of ethnic tensions and new forms of internal suppression. The war with Eritrea destroyed countless lives, resources, and development opportunities. The aftermath of the May 2005 elections plucked disaster out of the jaws of triumph, yielding a fresh polarization of political attitudes.

How can Ethiopia reverse this pattern of missed opportunities? I propose now to revisit those junctures with an eye to raising questions about what might be done to enact more benign solutions in the future. Let us ask: what structural openings had emerged in each case, what forces drove the country toward those less constructive solutions?

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3 The Emperor’s Silver Jubilee in 1955 had inaugurated the Ethiopian National Theater and a constitution allowed the lower house of Parliament to become an elected body. The First Five-Year Plan (1957-61) envisioned a strengthened infrastructure, particularly in transportation, construction, and communications. It proposed an indigenous cadre of skilled and semiskilled personnel to work in processing industries, in order to reduce Ethiopia’s dependence on imports, and to promoting commercial agricultural ventures. The emperor maintained contact with his people by traveling around the country; wherever he went, people cheered his presence with *ililtas* and a sense that the Head of State was a *gēta* to whom one could ultimately cry *Abêt*!

4 Agricultural Colleges at Alemaya and Jimma, University College of Addis Ababa at Arat Kilo, and the Gonder Health College with its pioneering teams of medical officers, community nurses, and sanitary engineers.
Five Missed Chances
1960: Year of Ferment. 1960 saw sixteen African countries achieve independence. With Ethiopia no longer almost the only independent sub-Saharan country, educated Ethiopians chafed that under European powers, other African countries had acquired economic and education systems that outshone their own. As one Ethiopian told me, “Our problem is that we never suffered under colonialism.” Impatience with Ethiopia’s slow pace, outmoded hierarchical structure, and conservative folkways grew, especially among Ethiopians returning from education abroad.

It was clear to me in 1960 that some of them yearned to engage in progressive forums of some sort, but were fearful of doing so. One complained, “Our culture praises gwebeznet (courage). Why have we become so afraid of speaking out?” What options were there? Progressives could have formed a political party. To be sure, they might have landed in jail, since the regime objected to parties and frowned on all voluntary associations and free publications. Still, they might have created a journal under the umbrella of enhancing civic education. They might have formed discussion groups; some did, but in secret—even the alumni association of Haile Selassie I Secondary School was clandestine.

The alternative was to change regimes by peaceful means. Gername Neway, a US-educated returnee eager for change, accepted this route initially. As provincial administrator in Walayta, he enacted reforms to ease the burden of tenant farmers—with innovations that earned him a transfer to Jijjiga, where he worked to integrate Somali Ethiopians more effectively by offering them schools, clinics, and roads. In Bahru Zewde’s words, Gername converted these “exile posts into stations experimenting in equitable administration” (Zewde 1991, 213).

Meeting official resistance, he enlisted his brother General Mengistu Neway, who commanded the Imperial Bodyguard, into a conspiracy that attempted a coup d’état on December 14. They did so while the emperor was in Brazil, hoping he would stay there in peaceable retirement. General Mengistu had refused overtures by his brother to use violence and counted on support from other military commanders. As one Bodyguard officer boasted to me a month before the coup, “When a signal for change is given, be-and innenesalan, we shall rise as one.” That was the preference of those who marched from Arat Kilo to the Piazza, with placards that proclaimed, “Ityopiya le-hulatchn be-selamawi lewet—Ethiopia for all of us through peaceful change.” This option also was not taken. Failed communication between Bodyguard and other military units led to a counter-offensive; army and air force troops defeated the rebels. A third option might have been for the rebel leaders, once defeated, either to give themselves up up or to flee and issue statements from hiding. Instead, prior to leaving the Grand Palace where the ministers and other high-ranking figures were held, Gername and others machine-gunned the hostages in cold blood.

The coup’s failure promoted the consolidation of imperial power, leading the emperor to focus on “rewarding those who had defended his throne, not in trying to solve the problems indicated” by their protest (Zewde 1991, 214). This produced continuing efforts to quell dissent and to spread the hegemony of Shoan Amhara rule, including efforts to marginalize the main other languages—Tigrinya, officially suppressed in 1970, and Oromiffa. It also led to annexing the federated province of Eritrea, in ways that undermined Eritrea’s more liberal democratic achievements—multiple political parties and a free press, which the British protectorate had


6 Colonel Sadat’s book describing how King Farouk had been deposed by sending him away from Egypt on his yacht reportedly impressed them (Greenfield 1965, 381).

7 A leaflet issued by the chief of staff to encourage civilians to capture the fleeing rebels stated: “People who seek to establish a truth should not run away” (Greenfield 1965, 434).
Ethiopia’s Dilemma

encouraged. In sum, the failure of Ethiopians to pursue constructive options in 1960 sowed seeds of later disturbances: the violence of the Derg, and the alienation of Tigrinya-speakers, Oromo-speakers, and progressive Eritreans.

1974: Revolutionary Breakthrough. The year 1974 created a large opening for structural change at the country’s political center. On the one hand, Haile Selassie’s waning abilities to govern as before became glaringly apparent. On the other hand, unprecedentedly, diverse groups mounted a series of protests airing a variety of grievances. This led to efforts to achieve the unlikely: a wholly peaceful change of political structure. “Ityopiya tikdem/yala mimin dem”—“Let Ethiopia progress/Without any bloodshed”—became the popular slogan of that heady time.

On the surface, this seemed almost plausible. A new cabinet was formed under conservative Endelkatchew Makonnen, later under the more popular liberal aristocrat, Mikael Imru. A blue-ribbon committee, respected by a wide range of civilian and military elements, drafted a progressive constitution, described as “years ahead of its time in terms of Ethiopia’s social and economic development” (Ottaway 1978, 41). Another committee was set up to investigate whether or not figures from the ancien regime suspected for wrongdoing were legally liable. Following the emperor’s deposition on September 14, the popular General Amman Andom was selected to head the military committee that had become the de facto governing power of the nation. Amman, an Eritrean himself, was well positioned to heal the country’s major festering wound: the rebellion of dissident groups in Eritrea.

The non-violent option was not taken. Already in February an engine of potential violence was forming when a cabal of junior officers organized an Armed Forces Coordinating Committee. As this committee, called the Derg moved to attain control; senior officers, civilian leaders, labor unions, and friendly foreign governments all stood by. One of its members, a misfit from Harar named Major Mengistu Haile Mariam, came to dominate the Derg. On November 23, Mengistu engineered a murderous attack on General Amman and then summarily shot 59 former imperial officials. That night, Paul Henze wrote, “The Ethiopian revolution turned bloody. Blood never ceased to flow for the next 17 years” (Henze 2000, 289).

Mengistu’s coup became aligned with communist intellectuals who supported his efforts to impose a Leninist-style revolution from above. They proceeded to confiscate budding enterprises, nationalize all land, herd farmers onto unproductive collective farms, and force tens of thousands of people into resettlement sites. Their heavy-handed policies and violent tactics provoked reactions in many parts of the country; the Derg period was marked by insurgencies and severe famine. Their uncompromising military action against Eritrea finally turned that ancient part of the Ethiopian homeland toward secession.

1991: A Multiethnic Polity. 1991 offered a reprieve from the Derg and yet another opportunity for non-violent change.8 The May regime change was painless enough: Mengistu fled to Zimbabwe, senior Derg officials were imprisoned, and EPRDF established control with hardly a shot fired. The turnover was followed by a national conference, which established a Transitional Government. A year later, the country’s first multi-party elections were held. Dozens if not hundreds of publications sprang up overnight. A new Constitution was ratified in 1995.

Before long, however, the EPRDF ascendancy mired the country into yet another period of internal discord. Viewed by some chiefly as a takeover of revanchist Tigrean rebels, the EPRDF victory unleashed a storm of protest at the Embassy of the United States, blamed for facilitating the transition. The removal of Shoan Amhara from power coupled with virulent anti-Amhara attitudes in many TPLF leaders stirred waves of Amhara chauvinistic response. The Oromo Liberation Front, central to the new regime’s commitment to ethnic regional autonomy, was not satisfied and refused to lay down arms. A similar attitude was taken by remnants of the EPRP

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8 It was with a sense of the importance of seizing this opportunity that the late Eshetu Chole delivered his challenging paper to the Ethiopian Economics Association, “Ethiopia at the Crossroads,” in 1992.

http://scholarworks.wmich.edu/ijad
group of radicals who had opposed both the Derg and the TPLF. The emphasis on ethnicity as an absolute value, manifest in the EPRDF’s commitment to ethnic federalism, traumatized those who considered themselves to be above and beyond tribal allegiances. For its part the EPRDF, reacting to these dismissive attitudes and to implement their own distinctive revolutionary doctrines, became repressive against journalists and individuals oriented to forms of political expression other than what the regime favored.

1998: Competition without Fratricide. After Eritrea became independent in 1993, official relations between the two countries were cordial. Their leaders espoused fraternity between the two countries and a policy of promoting mutual trade and cooperation. Within four years, issues regarding trade imbalance and currency restrictions, and possibly Ethiopia’s lingering grief over the loss of the Red Sea ports, began to sour those relations. What is more, boundaries between the two countries had never been demarcated. These issues might have occasioned an appeal for mediation by an international body, affording an opportunity to stabilize the anomalous relationship between a mother country and its ambitious young offspring. Instead, when Eritreans who entered the town of Badme in May 1998 were met with gunfire from Ethiopian militia, they launched an attack that extended from the Irob area all the way to Sheraro in the west, displacing hundreds of thousands of people and destroying health stations and churches. Full-scale warfare between the two states ensued quickly, producing an estimated 100,000 casualties and some 400,000 refugees. Both countries employed cluster bombs. In June 1998 Eritrea launched air-delivered CB-500 cluster munitions against the Mekele airport, two of which struck a school and residential area resulting in civilian deaths, wounds, and suffering, and similar hits caused dozens of deaths and injuries in the town of Adigrat. In May 2000 Ethiopia bombed two camps of internally displaced persons with BL-755 cluster munitions and hit civilian airports in Asmara as well.9 The cost of the war for the world’s two poorest countries was enormous, and led to subsequent destabilizations elsewhere in the Horn.10

2005: Democratizing Breakthrough. The first years of the 21st century found Ethiopia beginning to hit its stride. The economy grew, repressiveness abated. In 2004, for the first time since coming to power, Prime Minister Meles Zenawi was removed from Reporters Without Borders’ annual list of “Enemies of the Free Press.” The government decided to make the 2005 election a surge toward political pluralism. Opposition parties for the first time had access to the media, and televised debates between representatives from opposing parties were aired. The elections were monitored by international bodies, including representatives from the European Union and the Carter Center, who called the elections fair in many respects yet noted serious irregularities before and after Election Day. The election outcome saw opposition groups leap from 15 to 180 members of parliament and sweep into control over the city of Addis Ababa.

Ensuing post-election complications offered two options. One was to abide by existing National Election Board procedures and accept their verdict regarding disputed contests. Repeat elections in several of them actually resulted in switches of parliamentary seats in both directions. A second option, after the CUD party caucused and decided that its members would not enter the Parliament, was a negotiation with the government that went on for several days in late October.

Instead of either of these denouements, Ethiopia experienced fresh outbreaks of violence and stirrings of hatred. Compounding the June killings, the November demonstrations brought total fatalities to nearly two hundred. Tens of thousands were carted off to prison. The government incarcerated more than a hundred dissident political party officials, civil society

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10 One account concludes: “The Eritrean-Tigrayan elite have been bent on exporting conflicts and engaging in a self-destructive mission in the whole region” (Tadesse 1999, 190).
leaders, and independent journalists. Their long detention during court procedures judged to be flawed exacerbated animosities between the two sides. Resulting polarization weakened the new government’s claim to legitimacy and damaged its efficacy. The points just covered are summarized schematically in Table 2.

<table>
<thead>
<tr>
<th>DATE</th>
<th>Developmental Issue</th>
<th>Missed Constructive Opportunity</th>
<th>What Happened</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>Hunger for accelerated economic development and democratization</td>
<td>1. Nonviolent advocacy of reforms</td>
<td>1. Nothing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Successful nonviolent coup</td>
<td>2. Impulsive coup attempt</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Failed coup without assassinations</td>
<td>3. Random assassinations</td>
</tr>
<tr>
<td>1974-5</td>
<td>Social class egalitarianism</td>
<td>Differentiated land reforms</td>
<td>Stalinist collectivization</td>
</tr>
<tr>
<td>1991</td>
<td>Ethnic egalitarianism</td>
<td>Multiculturalist recognition</td>
<td>Imposed ethnic federalism → polarization</td>
</tr>
<tr>
<td>1998</td>
<td>Geopolitical boundaries</td>
<td>International adjudication</td>
<td>Destructive warfare</td>
</tr>
<tr>
<td>2005</td>
<td>Pluralist political democratization</td>
<td>Adjudicated multiparty election outcome</td>
<td>Incendiary reactions; deaths, casualties, incarcerations</td>
</tr>
</tbody>
</table>

Table 2. Issues and Openings.

An Ambiguous Balance Sheet

Before proceeding further, I emphasize two points. For one thing, probably no society has ever responded to all its challenges in the most constructive and beneficial way possible. Beyond that, although Ethiopia took many damaging missteps in the past half-century, the country accomplished a great deal of progress on the always-difficult paths toward modernization.

In response to the abortive coup of December 1960, the Emperor made a few progressive ministerial appointments, notably Yilma Deressa who transformed budget and appropriation procedures in the Ministry of Finance (Clapham 1969). Ethiopia's first university (Haile Selassie I University, now Addis Ababa University) was established and quickly flourished. The economy developed steadily, with stable currency and a solid financial position. Haile Selassie reached his pinnacle as an African and world leader. Ethiopia’s prominence in African affairs was marked by the establishment in 1963 of Addis Ababa as home to the Organization of African Unity and the UN Economic Commission for Africa. Ethiopia stayed on course while much of the rest of Africa deteriorated.

However heavy-handed and destructive, the Derg reforms valorized the public use of languages other than Amharic, notably Tigrinya and Oromiffa, and religions other than Christianity, notably, Islam. Although the quality of education deteriorated, the Derg increased school enrollment dramatically; during the Derg’s first decade the number of students in government schools rose from about 800,000 to nearly 3,100,000 and the number of students in higher education likewise quadrupled (Clapham 1988, 150). They started the Workers’ Party of Ethiopia in 1984—the first political party in the country’s history—and established the kebele system still used to organize neighborhoods.

The TPLF victory rid the country of an oppressive dictatorship and such damaging policies as collectivization of agriculture and forced resettlement of hundreds of thousands. TPLF maintained the value of Ethiopia’s currency against all odds: Ethiopia may be the only country to emerge from an authoritarian regime and economic collapse without suffering from serious inflation. TPLF also gave unprecedented levels of political autonomy to peoples in the southern...
parts of the country. The EPRDF regime expanded the construction of modern buildings and roads, and opened hydroelectric plants that doubled the country’s energy supply.

For the border war with Eritrea, to be sure, it is almost impossible to find any positive achievement. By contrast, the 2005 elections achieved a great deal. They opened up electoral competition to an array of national political parties and offered them unprecedented access to the media—a major milestone in Ethiopia’s journey toward political modernity. The disasters of the Derg period and the repressions of EPRDF can also be "credited" with driving hundreds of thousands to emigrate. That created a large diaspora of modern-educated Ethiopians whose continuing devotion to their homeland makes them part of the new Ethiopian nation—which consists, I noted elsewhere, of three parts: ye-bét agar, ye-wutch agar, and ye-cyber agar (Levine 2004)—and which positions them to make great contributions to Ethiopia's development.

Such positive accomplishments must be kept in mind. Nevertheless, they came at far too steep a cost. To sum up what of all of us must be feeling about these decades I say: Ethiopia, you deserved better! And it is in hopes that whatever produced such dire outcomes might be modified in the future that I inquire into what factors were responsible for those missed opportunities. For that, let us review those episodes in a search for possible common patterns.

An Ethiopian Dilemma: Three Troublesome Factors

Wax and gold: a culture of distrust. Two factors involved in these missed opportunities, I suggest, represent customs that were adaptive in pre-modern periods but have become dysfunctional in the present. One is a deep-seated habit of suspiciousness and distrust in social relations. The prevalence of this tendency was thematized in the title of my first book, Wax and Gold. For a social order where so much hinged on securing rights to use land, an ethos of manipulative tactical scheming proved advantageous. For a political order in which power and status hinged on strict deference to superordinate patrons, the open voicing of critical sentiments was intolerable; they had to be expressed in some surreptitious manner. That order made it hard to generate trust, and disposed people to be always on the lookout for hidden motives and deceptive maneuverings.

When one examines the episodes I have been describing, this trait is hard to miss. In 1960, endemic suspiciousness and distrust colored the entire social fabric, preventing even those who thought themselves friends from discussing grievances and aspirations openly. This mindset kept them from any proactive para-political initiatives. The coup leaders and the generals who opposed them were presumptive friends, but held back from sharing ideas about the need for change and in the end battled against each other. When General Merid of the loyalist forces visited General Mengistu in the hospital before he was hanged, the latter reportedly told him: "I thought you would understand."

The Crown accentuated the pervasive distrust. Following the coup attempt as before, the Palace discouraged transparency in public communications. After Eritrea was annexed, a number of high school students from Dessie wanted to come to the Palace to express their appreciation of the Emperor’s bold move. He forbade their visit, reportedly saying, “If they come now to say they approve of my policy, what is to prevent them from coming in the future to say they disapprove?" This fear of open public discourse lay behind the Emperor’s misguided policy of suppressing political parties and the free press in Asmara. It even led to the suppression of Tigrinya in 1970, a grievous error, especially in view of Paul Henze’s observation that “Amharic is firmly established as the national language with English in second place. . . . What this goes to prove is that the Imperial regime

11 According to Greenfield, “an ambiguous reply he made early in 1960 to a remark of Mengistu’s and the fact that Merid’s grandfather, Dejazmatch Mangasha, had been out of favour with Haile Sellassie, led Mengistu to assume—mistakenly as it turned out—that Merid would support an attempted coup” (Greenfield 1965, 378). And Merid himself, shortly before dying a few years later, reportedly expressed remorse over his suppression of the Mengistu coup, saying “I regret nothing so much in my life.”
could have safely afforded to be much more open-minded about language questions than it was” (2007, 214).

The 1974 demonstrations represented a big shift in the openness of public protest. Even so, what proved to be the central political dynamic was kept clandestine and murky for nearly a year after the initial protests of February. How the Derg was organized and where it was heading remained secret. Rumor remained the prime medium of public communication. Nearly universal relief over the dissolution of the Derg in 1991 gave way to mutual suspicions and incriminations. Although Oromo Liberation Front leaders gained a great deal in negotiations over the new order, they feared laying down their arms following the EPRDF ascendancy. Remnants of the EPRP remained armed. Above all, although serious substantive differences arose between Ethiopian patriotic nationalists and TPLF proponents of ethnic federalism, these differences were compounded by distortions that stemmed from deep suspicions about one another’s motives. The TPLF leaders accused the nationalists of being Amhara chauvinists, even though they included numerous non-Amhara people and for the most part Amhara Ethiopians whose allegiance was primarily to Ethiopia as a multiethnic nation. The nationalists accused the TPLF leaders of being agents of their Eritrean comrades in EPLF, even though TPLF and EPLF had been enemies during much of the previous decade and seeds of future animosity were not hard to discern below the surface.

These seeds sprouted in 1998, when distrust between brothers yielded to lethal attacks. Medhane Tadesse’s searching analysis of the background of the war throws light on how ambiguous communications between the two sides helped trigger the outbreak of hostilities. From the outset, Ethiopian leaders failed to map out guidelines concerning future relations between the two governments and peoples, leaving vague such matters as the legal status of Eritreans in Ethiopia, arrangements for economic cooperation, and border demarcations (Tadesse 1999, 135). Subsequently, he suggests, EPRDF leaders made their attitude toward the EPLF appear warmer than it actually was, whereas the Eritreans “must have expected favors from the Tigray without publicly admitting that they really needed their help” (155).

The tragic dénouement of summer 2005 represented nothing so much as a flagrant manifestation of the archaic pattern of distrust. The regime acted on the suspicion that the opposition was deliberately stirring up anti-Tigrayan hostilities when the CUD leadership explicitly discouraged their followers from doing anything of the sort. They also ran with the idea purveyed in a tract by Negede Gobeze that the opposition should mobilize the populace in an effort to overthrow the regime through a kind of Orange Revolution, when in fact the opposition wanted nothing more than an exact count to be respected. Based on the regime’s initial hasty declaration of martial law on Election Day and premature announcement of victory, the opposition went on to distrust nearly every post-election action of the regime. The regime’s hyper-vigilance in the wake of their suspicions led it to provocative incidents and well-documented excessive violence against demonstrators in June and November of that year. The latter confrontations, with fatalities on both sides but overwhelming brute violence from government security troops, might have been averted had last-minute daily negotiations at the end of October succeeded. Although those negotiations reportedly broke down when the EPRDF refused to establish a neutral Election Board, it is my understanding that mutual distrust played a role in their breakdown.

Wendinet idealized: a culture of martial honor. The other dysfunctional tendency exhibited in Ethiopia’s series of missed chances reflects the prevalence of what I have elsewhere

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12 For an interpretation of the differing narratives that underlay this mutual distrust, see Levine 2006.

13 They studiously maintained that a complete victory had been stolen from them, even though some foreign analysts—even those antagonistic to the regime, like Siegfried Pausewang (2006)–questioned the claim that the opposition might have won the election.
described as a “masculinity ethic and the spirit of warriorhood.” I refer here to the traditional code of wendinet, masculinity, which prescribes a courageous disposition to fight enemies. Related to this is a sensitivity to personal slights and a commitment to man yebiltal—‘who in the world is superior to me?’ In a society with politics dominated by warfare this value is self-evident.

The wendinet factor was at work in each of the missed chances I have been describing. It was manifest in the last-minute decision of the coup leaders to assassinate their hostages in the Green Room of the Old Palace. It underlies a kind of subliminal admiration for the ‘tough guy’ rebel who shoots his way into power, like Kassa Haylu on his way to becoming Emperor Tewodros, or Mengistu Haile Mariam on his ruthless route to supreme power in the Derg. It informs the passionate heroism of those who endured more than a decade of hardship existence as guerilla insurgents. It was manifest in the grandiose ambitions of those Ethiopians who call themselves Eritreans. Eritrea’s leaders voiced illusionary claims to an economic miracle like Singapore and to a mantle of political leadership for all Northeast Africa, which prompted macho interventions in Sudan, Yemen, and Djibouti. They threatened Ethiopia’s leaders with the words "they should know that we are going to give them a hard time" if the latter dared to introduce a new trade policy (Tadesse 1999, 154).

The combination of distrust and wendinet has probably impeded Ethiopia’s capacity to take advantage of structural openings as much as anything. It casts political options within a schema of “metazez or meshefet,” obey or rebel. The compulsion to obey superiors means that any stirring of dissent must be either suppressed or expressed in devious ways. The ideal of wendinet means that if the dissent becomes too intense, the way to express it is to rebel against the leader and to oppose him from afar.

**The seduction of revolutionary ideologies.** In addition to old patterns that impede optimal courses of action, one can identify a third factor of a radically contrasting sort. This is the proclivity to emulate foreign patterns to a degree that does not fit Ethiopia’s own historic and current realities. This factor reflects the doctrinaire quality of the modernizing ideologies with which Ethiopian political leaders identified.

Like his peers, Germaine Neway returned from education abroad with an ardor to accelerate the pace of building schools and factories and improving the life of peasants. Like many Western-educated radicals, he assumed that the populace was similarly disgruntled and ready for massive change. This assumption proved erroneous. In words which I am told Ras Imru spoke about him, “Germaine ye-itopya hizb gemet alaweqem”—“Germaine did not understand the limitations of the Ethiopian people.” This was to be a top-down quasi-revolutionary movement, which ran counter to the persisting deference of the people to the authority of the throne, the church, and the aristocracy, all of whom opposed the coup. Accordingly, the coup leaders actually mobilized troops on the grounds that Haile Selassie’s position was being attacked and they needed to defend him! The intensity of Germaine’s

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14 This, too, was described in *Wax and Gold* and related publications of the time (1965b, 1966, 1968) as as well in later publications (1974, 2005).
15 Saving face is important in all cultures, but in those permeated by martial values it ranks high and valorizes extreme reactions.
16 Indeed, Germaine reportedly egged on his amiable brother when Captain Dereje Haile Mariam approached the palace calling Mengistu to surrender, shouting “Out of my way, woman of a brother!” and shooting the captain dead. The report is from Greenfield 1969 (429), but an eye-witness account credits Mengistu himself with the action.
17 Meles Zenawi confessed in a Tigrinya publication that he had felt at his best when fighting in the bush, and the standoff in 2005 arguably owes something to a determined pride in not giving in to the other.
commitment to revolutionary change found expression, finally, in his order to assassinate the hostages.

By the end of the 1960s, Ethiopian students at home and abroad were seduced by the radicalization of students in many countries. They began to identify with the tenets of Marxism-Leninism and with the Soviet Union and China as models of modernization. This had two deleterious consequences. For one thing, it inclined them to find the truth about Ethiopia’s situation in the intellectual abstractions of the Marxist tradition. It also inclined them to adopt the Manichean perspective of committed Marxists, using the idiom of Marx’s vitriolic attacks on social classes and an inclination to demonize the other. These tendencies have haunted all further Ethiopian political conduct, issuing in the violent “anti-feudal” enactments of the Derg and the “anti-Amhara” and radical “ethnic-liberationist” enactments of the TPLF. They marked the bitter antagonism between TPLF and EPLF regarding which group held the more valid socialist revolutionary doctrine, a fight that underlay the virulent mutual incriminations of Ethiopia and Eritrea in 1998. They were flagrant in the condemnatory rhetoric of the EPRDF and CUD in 2005.

All these phenomena evince a lack of connectedness to Ethiopian realities on the ground, lack of respect for the common sense of the Ethiopian people, and departures from traditional Ethiopian customs of tolerance and everyday morality. That Ethiopia was in for a horrible time due to such attitudes pierced me when an Ethiopian graduate student said to me in the early 1970s, “What Ethiopia needs to do is what Russia did.” When I told him that the consequence of the communist policies under Lenin and Stalin resulted in the deaths of about 10% of the Russian people, he promptly responded, “Well, Ethiopia has 30 million people right now. The death of three million would not be too high a price to pay for progress.” Ethiopia’s dilemma of the past two years reflects the persistence of doctrinaire positions and polarizing sentiments on both sides. The points just made can be seen schematically in Table 3.

<table>
<thead>
<tr>
<th>DATE</th>
<th>Traditional Distrust Factor</th>
<th>Traditional Martial Ethic</th>
<th>Alien Factors</th>
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| 1960   | 1. Distrust and fear in civilian elite  
2. Suspiciousness within military elite         | Commitment to violence as a means of political change           | Modernization ideologies                          |
| 1974-5 | Distrust of democratic process                                                              | Rulership succession through martial combat                     | Marxist-Leninist-Maoist ideologies                |
| 1991   | Distrust of democratic process                                                              | Continued resort to arms                                        | Stalinist ideology of “self-determination of nationalities” |
| 1998   | Intense mutual suspicion                                                                    | Martial pride; drive for revenge                               | Arabist support for Eritrean insurgency           |
| 2005   | Intense mutual suspicion and mutual demonization                                            | Fight against the system, rather than within the system         | Tenacity of radical polarizing ideology           |

Table 3. Three Factors Leading to Sub-Optimal Outcomes.

...And Now

To this point, I have sketched a series of openings presented, opportunities missed, and advances made. Today’s Ethiopia has taken unmistakable steps toward many of its modernizing goals – bureaucratized administration, codified legal systems, commercial facilities, modern technologies, academic institutions, scientific research, multicultural equity, transportation and communication, and political integration. A plethora of tasks remain, not least to address the increase in chronic poverty outlined by Abu Girma Moges (2007) and Tesfaye Teklu (2007) and the looming catastrophic population growth (Levine 2006b) and health crises (Asfaw 2007). In pursuing these tasks, new tensions might provoke further violence and suboptimal solutions.
Enhancing functionality through trust and civic courage. The diagnosis I have offered suggests ways that may enable Ethiopians to move forward without repeating the costly mistakes of the last half-century. This would mean dealing with the symptoms of chronic suspiciousness and distrust, compulsive combativeness, and inattention to Ethiopia’s own traditions and resources. The solution, in each case, involves staying rooted in Ethiopia’s traditions while adapting creatively to present needs and modern realities, a solution that involves structural differentiation.

Regarding the first factor, it means preserving the wax-and-gold complex where it still belongs – in religious gene, in secular poems, and in social banter – and replacing it in the area of public discourse with more straightforward, transparent communication. Regarding the second, it means preserving the warrior ethos when security situations require, but keeping it out of politics and cultivating civic courage to replace martial courage in the latter realm. The fusion of these two traits produces what I am calling the “metazez or meshefet” complex – either obey and express dissent ambiguously, or exit the system and rebel. Let me relate two personal experiences that may drive this point home.

At 11:30 am on Friday, December 18, 1960, I spoke with Germame Neway just before he left an abortive negotiation with Major Asefa Lemma at the U.S. Embassy and returned to the palace for that fateful shootout. His final words to me were as follows. “Even if our cause is lost and I am killed,” he said, “we have at least spoken the truth in this land of deception.” Over the years I have come to see more significance in Germame’s words than I did at the time: in this land of deception, the only way one can speak the truth appears to be through violent rebellion. Metazez or meshefet.

Forty-five years later, a kindred thought was voiced by a prominent Ethiopian-American who wrote me in the wake of my efforts to foster dialogue among polarized Ethiopians in 2006: “Ethiopia will never make any progress unless we learn to fight as hard within the system as we do against the system.” And now listen to this: when I asked him if I might use his name when citing this inspiring statement, he said, “Oh no, I don’t dare to do that.”

In a searching analysis prepared for this conference, Salaam Yitbarek (2007) outlines a complex of related Ethiopian traits. He identifies these as personalization of issues, parochialism, mutual suspicion and mutual distrust, paranoia, lack of empathy and empathetic understanding, character assassination, lack of openness, holding grudges, and envy. Importantly, Ato Salaam offers an incentive to move beyond these impediments by noting that to overcome them is to do something to create more social capital.

Enhancing functionality through self-understanding and self-appreciation. The third factor that has derailed Ethiopia’s efforts to modernize, an ungrounded attachment to alien ideas, can also be addressed through a sort of structural differentiation. How can Ethiopian intellectuals incorporate ideas from abroad into a grounded sense of evolving realities? How can they move from ideological fixities to pragmatic solutions?

One piece of this answer lies all around us: engaging devoted scholars to address current issues and to communicate with one another in forums and media that enhance the chances of sensible interventions to promote capacity building. This effort might well include serious investigation of resources that Ethiopian traditions may contain. Although modernization imperatives remain stronger than ever, they must no longer be understood in terms of uncritical imitation of forms from other places. In recent scholarly work this way of thinking about modernity has been foregrounded by Prof. Shmuel Eisenstadt and colleagues, under the banner of what they call “multiple modernities.”

At a more modest level, I propose here the metaphor and the reality of the lesson of the eucalyptus tree. Emperor Menelik II sought to solve Ethiopia’s reforestation problems by importing eucalyptus from Australia. It is telling that the Amharic phrase for this tree became

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18 Most of these are traits that I have described over many decades (see especially 1965a, 1965b, and 1995).
Ethiopia’s Dilemma

*bahr zaf*, “the tree from across the sea” (*bahr*). Eucalyptus has been used ever since as an easy source of wood for cooking and construction. The problem is, eucalyptus trees are invasive, destroying other plants with their rapid growth. Moreover, they are extremely ‘thirsty’ and dry up rivers and wells. Their dangers became so evident early on that Emperor Menelik issued a decree for them be uprooted and replaced with mulberry trees; this was never enforced. In the meantime, over the past half-century, Ethiopia’s level of forestation dropped precipitously.¹⁹

Is it not time to stop planting the *bahr zaf* and start planting indigenous trees that are fast-growing, hardy, and environmentally friendly—as knowledgeable local environmentalists like those associated with Lem Ethiopia have long advocated? Some of these species have been neglected so long that they are now even threatened. These include the *weyra* (olive trees), the juniper, the *tigur inchet*, and the *Igenica Abysinica* (*kosso*). What could be a more felicitous way to celebrate new millennium than to encourage every citizen of Ethiopia who lives in a suitable place to plant one of these indigenous trees?

Beyond that: what could be more suitable now than to encourage all Ethiopian leaders to discard attitudes imported uncritically from abroad and make use of indigenous customs friendly to the societal environment. One of these is age-old patterns of inter-group toleration, as manifest, for example, in the multiethnic and multireligious pilgrimages such as at Zuqwala and Qulubi Gabrael. Another is the near-sacred right of peasants to own their own land. Another is the resort to mediation by “elders,” *shimgelina*, as a means of conflict resolution. For another, what could be more beneficial than to incorporate and expand the customs of Oromo assemblies, the *gumi gayo*, which open with calls for mutual respect and involve so many felicitous procedures for attaining group harmony? And let us not forget the striking tradition of forgiveness which, as Charles Schaefer (2006) tellingly documents, Ethiopian rulers so often employed as a way of restoring social equilibrium and discouraging impulses to revenge. For one memorable instance of this, recall the gesture of Ras Tafari Makonnen who, following his defeat of thousands of Negus Mikael’s followers after the battle of Segele, performed “a remarkable act of clemency,” declaring “We are all Ethiopians” (Marcus 1987, 24).

Recovering such traditions yields the additional benefit of moral inspiration. This theme was replayed recently by Jonathan Lear in *Radical Hope: Ethics in the Face of Cultural Devastation*, which tackles the haunting existential question of what a people is to do once their traditional culture has become obsolete. For Lear, the solution “would require finding something in one’s own culture or tradition that would enable one to draw new meaning from old definitions that are no longer appropriate.” Lear was talking about the Crow Indians of North America, whose great chief Plenty-Coups describes the erosion of Crow culture in the late 1920s by saying: “When the buffalo went away the hearts of my people fell to the ground, and they could not lift them up again. After this nothing happened.” Karl E. Knutsson reported a similar sentiment in his study of the Macaa Oromo:

> When gada was destroyed . . . the bull refused to mount the cow . . . the crops that were cultivated no longer grew, and the oxen refused to fatten. . . . There were no longer any real elders, and few children were born. . . . When the gada customs were destroyed, everything else was also destroyed . . . the man who had formerly respected truth and justice abandoned them. (Knutsson 1967, 180)

All over Ethiopia, as throughout the world, global modernization entails obsolescence of certain cultural forms. Their loss has been linked with contemporary ills such as vulnerability to demagogues, crime, suicide, substance abuse, and fundamentalism. Ethiopian tradition offers a multitude of resources on which to draw in inspiring a new courage to hope.

¹⁹ This is so even if the widely cited figures of 35% in 1957 dropping to 2.5% in 2007 are exaggerated. What is clear is that erosion due to the decline of woodland has been responsible for flooding and impoverished topsoil, and this at a time when the loss of good soil no longer benefits Egypt but clogs up its dams with silt.

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A missing revolution

Returning to the paradigm of modernization processes touched on at the beginning, it is clear that Ethiopia has gone a great distance on dimensions of increasing equality and extensions of rights; political centralization, mobilization, and nation-building; specialization and increased productivity; and the creation of scientifically-educated elites (although a goodly portion of the latter live in the Diaspora).

In one domain classically associated with modernization, Ethiopia has yet to make a signal advance. That concerns the process of rationalizing personal conduct in everyday life, a process so fundamental to modernity that it has acquired its own name as "the disciplinary revolution" (Gorski 1993). This involves a complex of traits including a commitment to an ethic of hard work, punctuality, reliability, responsibility, and a sense of vocation. The importance of this dimension in transforming the economies of Western Europe and North America was established in the classic work of Max Weber, who associated it with the new ethical habits introduced with the Protestant Reformation. In other countries, it has been associated with different cultural patterns: in Japan, with an ethic inspired by the samurai code of duty to the collectivity (Bellah 1957), in Russia and China with work ethics associated with communist ideologies.

What could possibly serve as the Ethiopian equivalent of the “Protestant Ethic”? – a question, interestingly, that was posed in a letter sent me on the eve of my first voyage to Ethiopia in 1957, by the late distinguished psychologist Erik Erikson. The chief message of both of my books on Ethiopia was to envision a future built confidently on enduring features of Ethiopia’s past. To begin with, it is heartening to note that some of the traditional religions are beginning to adjust themselves to novel challenges and reach out to young people, who are desperately in need of moral guidance. The schools of course have a crucial role to play in moral socialization. Across the board, enhanced economic opportunities are essential for young people to have futures to look forward to. But to engage Ethiopians in ways that mobilize their energies on behalf of self-discipline and striving for excellence requires something more. It requires an overarching vision of the good life in which those traits find meaning. I am doubtful that this can occur if the largest frame of reference is that of tribal loyalty. It requires something of transcendent significance. It would be hard to find something more compelling than a renewed vision of Greater Ethiopia as home to a diversity of citizens and groups enjoying basic rights in an age-old and continuing multiethnic society.

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Political Economy of Poverty Reduction
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Abstract
This paper develops a political economy analysis of the design, adaptation and implementation of poverty reduction policies in Ethiopia. It assesses the experience and identifies the impediments to poverty reduction in the country and explores the prospects for sustained improvement in standard of living of the population. The central theme of the paper is that effective poverty reduction policies require credible political and institutional reforms that would engage all economic agents in the country to improve the allocation and efficiency of economic resources for sustainable and equitable growth and development process.

Introduction
Poverty is a multidimensional and dynamic concept. It has multiple causes that exhibit economic, social and political characteristics and hence poverty reduction policies require multidimensional approaches and strategies. Poverty reduction policies have become one of the priority policy targets of governments in developing countries and the pillar of external financial assistance from donor countries. The challenges to reduce poverty are formidable in developing countries where poverty is deep and widespread, income is extremely low, growth rate is weak and income distribution is uneven. These features of the production and distribution of output create systemic tendency for the poverty elasticity of income to be weak, making the growth induced poverty reduction less effective (Besley and Burgess, 2003; Bourguignon, 2003). In economies where the initial pattern of income distribution is highly unequal and vertical mobility is restricted by economic, social and institutional hurdles, economic growth –if it happens at all- tends to have limited impact on reducing poverty. Even economies with remarkable growth rate could not achieve sustainable poverty reduction if the growth process does not generate productive job opportunities, mobility, and accumulation of assets and capital for an increasing share of the population. Growth without development becomes a possibility. The pattern, characteristics and sector composition and sustainability of growth rate are therefore as important for poverty reduction as the pace of growth performance.

Poverty in Ethiopia has economic, political, demographic, geographic, environmental, and policy roots and causes. And yet, politics is the root cause of persistent and chronic poverty in Ethiopia. Ethiopia is one of the poorest countries in the world where low income and productivity, weak capital accumulation and investment, high levels of unemployment and underemployment are the main features of the economy. The agrarian based subsistence economy has been subject to the vagaries of natural forces and hostile political environment and hence it could not achieve sustained economic growth as well as structural transformation. When an economy finds itself in such a situation, chronic poverty and vulnerability defines life for the majority of the population. It takes structural change and fundamental political and institutional reforms to enable economic agents realize their economic potentials and improve their productivity and generate improvement in living standards.

The Ethiopian economy has failed to achieve structural transformation and remains largely subsistence oriented mainly because of misguided economic policy and autocratic and repressive political regimes. Agriculture generates less than half of the GDP while employing nearly 80 percent of the labor force and providing livelihood for more than 90 percent of the population.

The central challenge of economic growth and poverty reduction in Ethiopia is essentially how to generate sustainable rise in the productivity of the labor force in agriculture, improve the application of modern and appropriate technology and inputs in the sector, reduce its vulnerability to shocks, secure non-farm related activities to the rural residents and enable the sector play a
leading role in growth process of the country. The agricultural sector is not capable of supporting a rapidly increasing rural population at its prevailing state of technology, labor productivity and policy environment. Productivity level of the peasants remain near subsistence level and peasants work hard on their fragmented and ever dwindling plots and an emerging army of landless peasants has become a critical issue of concern. Capital investment, application of modern and improved agricultural production technology, secured landownership, and effective financial services are some of the factors that could initiate and sustain improvement in productivity in agriculture.

The main impediments to poverty reduction in Ethiopia emerge from a complex web of interaction of economic, political, demographic, social, geographic, and institutional factors and hence poverty reduction policies should address these underlying forces to develop strategies with lasting effects (Moges, 2006; 2013a). This paper addresses the political economic forces that have impeded sustained poverty reduction in Ethiopia. It examines what factors have constrained the escape route of the subsistence peasants from earning a decent living and improving their productivity and in the process generating resources for capital accumulation and sustainable economic growth of the national economy. The paper argues that the political economic forces have deprived the Ethiopian peasantry off earning a decent living and kept the economy in low level equilibrium poverty trap. It underlines the necessity for reforming the political institutions and governance to achieve sustainable and shared growth that could achieve prosperity and poverty reduction. The paper assesses and critically examines the poverty reduction efforts and attempts to highlight the central issues in addressing poverty reduction in the country. The main purpose of the paper is not to unduly criticize the collective endeavor of the nation to reduce poverty and those living in chronic poverty. It is rather to focus attention on a more realistic assessment of the extent of the challenge of poverty in the country and carefully outline the policy measures and reforms that would be necessary to achieve sustainable poverty reduction in Ethiopia. I am fully aware of the daily struggle of proud and hardworking Ethiopian families in their effort to earn a decent living. This genuine effort, however, could be successful and bear fruit only if it is not hampered by misguided economic policies that deprive millions of Ethiopians from earning a living and in the process contribute towards the development of the national economy. For quite a long period and under the disguise of several excuses, the majority of the Ethiopian population has not been able to work in an economic, political, social, and institutional environment that cultivates productive use of the limited economic resources that exist at their disposal. Faced with such a challenge and with a system which uses all kinds of coercive methods, it would not be surprising for most Ethiopians to live in destitution and abject poverty.

The rest of the paper is organized as follows. The next section briefly reviews the main conceptual and measurement issues of poverty and poverty reduction and draws implications for the Ethiopian situation. Section three addresses the economic, demographic, political and policy issues related to poverty and poverty reduction in Ethiopia. Section four deals with the broad policy issues and explore strategies for addressing the problems of chronic poverty in the country. The final section draws concluding remarks.

Poverty: Conceptual and Measurement Issues

Poverty is a multi-dimensional concept. It generally refers to the inability of households to provide sufficient subsistence and to lead a decent economic and social life. The concept of poverty reduction, as currently used, has ambiguous features and imprecise meaning (World Bank, 2004, Chen and Ravallion, 2001, 2004, 2007; Deaton, 2001, 2002; Kanbur, 2001; OPHI, 2013; Moges, 2013b; Stedman, 2005). It is always necessary to precisely define what one means and intends to capture by the concept of poverty.

When national economies declare in their policy statement to reduce poverty, the issue involves identifying the poor in reference to a given yardstick, counting the number of poor people, putting this figure in relation to the entire population of the country or the region in which
they reside, characterizing the nature, underlying causes, and dynamics of their poverty, and finally developing strategies to address the problem. All of these issues are complex enough by themselves and could even be more so when they interact with other political economy variables. The lack of precision and variations over time makes the concept vulnerable to political yard sticking in which actual poverty problems are not directly addressed. The headcount poverty index, for instance, could be reduced without necessarily reducing the absolute number of people struggling in chronic poverty. This is particularly relevant in countries where population growth is fast, life expectancy is short and more children are born into poverty than those born in non-poor families or escaping the poverty trap. Who is poor and who is not largely depends on the poverty threshold the country adopts and whenever this yardstick is not realistic enough, the resultant poverty indicator would only be misleading and unrealistic. Even when the benchmark yardstick is realistic enough, the poor are not homogenous. There is diversity within the camp of the poor and a concept of poverty would be partial if it fails to capture this essential feature of differences within the ranks of the poor. Moreover, the concept has inter-temporal fallacy in that the poverty reduction strategy might become the victim of its own success. If one assumes that public policies reflect the will of the majority, at least in a democratic political setting, decline in the poverty index reduces the incentive for public policies to emphasize on further reduction measures especially when such measures are financed by contributions from the non-poor segments of the population. It therefore becomes important to develop poverty elimination strategies that appeal both to the poor and the non-poor in society and emphasize the idea that eliminating chronic poverty is to the vested economic, social and political interest of the whole population in a nation. The implication of such a perspective is that poverty could be eliminated only if there is a national consensus and support for anti-poverty policies and strategies. By extension, poverty reduction policies have to be seen in light of economic growth and development effort so that the growth process engages and involves all economic agents in all walks of life. The change in the poverty indicators could result from growth of income relative to the poverty line, changes in the distribution of income in favor of or against the poor, the reduction of the number of people living in chronic poverty, the propensity of vertical mobility in the system, the capacity of the system to shield the destitute from chronic poverty, shocks to the vulnerable non-poor who barely stand away from the poverty contour, increase in population, and the combination of all these factors. A strategy to reduce poverty should therefore be undertaken with a clear understanding of what mechanisms influence the situation and dynamics of poverty in a country.

The issues of poverty reduction could also be analyzed from the perspectives of the process of economic growth and distribution of economic opportunities across economic agents and households. The level as well as growth of mean income, relative to the poverty line, is an important factor in reducing poverty. An economy might find itself in a situation of generalized poverty where aggregate output is not big enough to provide decent living standard for all. In such a situation, average income falls short of the poverty line. This phenomenon emerges where economic agents and resources are underutilized, unemployed, underemployed or economic agents do not have sufficient capital or technology to work with for a number of institutional, policy, political, social and economic reasons. The first order of priority in such a situation is to unburden economic agents from such constraints and develop strategies to eliminate structural bottlenecks for the realization of the economic potential of the country. This in turn requires thoroughly examining the economic, social, political and behavioral factors and institutions that give rise to such under-capacity utilization of natural and human resources in the economy.

Even when an economy improves its productive capacity and where average income is higher than the absolute poverty line, output may not or could not be equally distributed across households. This is so partly because inequality and its root causes extend beyond economic forces.
Observation of cross country patterns of income distribution suggests that even the most egalitarian societies have index of inequality in the range of 0.20 to 0.25 whereas the most unequal economies register about 0.60 to 0.66 (Milanovic 2003; WIDER, 2008). However, not all inequality in a system reflects injustice. When the rewards that economic agents receive adjusted relative to their effort, dexterity, and creativity are fairly balanced it maintains the incentives for higher efficiency and growth in national income.

Economic growth is indeed the most powerful instrument to reduce poverty provided that it creates employment opportunities to the poor, increases the demand for factors that the poor owns, and creates the condition in which the poor develop the capability to accumulate productive assets that prepare them for productive and better life (Kraay, 2004; Morduch 1998; Krueger and Lindhal 2001; Blis and Klenow, 2000). Economic growth has twin effects both of which have important effects on poverty indicators. From analytical perspective, economic growth could imply increase in the average income of all households without necessarily changing their relative income. There is also a distributional effect in which the growth process is accompanied by changes in the relative income with ambiguous effect on the poverty indicators (Ravallion, 2001; Kraay, 2004). Nonetheless, the growth process might exhibit anti-poor elements when economic agents are not positioned to equally participate and benefit from the growth process due to lack of appropriate training and human capital, access to financial services, weak business and investment climate, weak institutions, and restrictive economic policies.

**Is economic growth distribution neutral?** There are strong tendencies that cast doubt on the distributional neutrality of growth. The growth of income of a national economy does not benefit all economic agents equally for a host of reasons including differences in resource endowments; inputs market imperfections, government policies, institutions, and social relationships. Economic growth benefits first and for most those who have the capability to initiate growth and it eventually reaches those economic agents who get employment opportunities and those who produce factor inputs for the production processes. This process is gradual and its flow does not necessarily involve a significant portion of the population.

It is possible that economic growth could be driven by a sector with very weak linkage with the rest of the economy and with inconsequential effect on employment generation. Such a growth process can give rise to deterioration in the distribution of income and worsens the inequality situation leaving the majority of the population behind.

In the context of developing countries, poverty reduction policies are complicated by demographic factors (Brown et al., 1998). These countries are characterized by rapid population growth with high mortality and birth rates and large family size. These features in turn mean relatively young population composition that exerts considerable challenge as well as future opportunities to economic policy makers to take into consideration in their effort to address the issue of poverty. The marginal propensity of fertility with respect to income of families is negative unlike the historical cases in Europe and USA where it was positive (Guinnane, 2011). Poor families hence tend to have larger family size than their richer counterparts. In a system where population is growing fast and demographic transition is yet to materialize, most children are born into poor families that compound the problem further not only on current poverty situation but also on how to provide them with necessary health, educational, and other social services that creates opportunities and capital for productive life. In this situation, poverty becomes the only inheritance for children from poor families. If a system manages to equip its citizens with the necessary human and physical capital, it can sustain economic growth and could have opportunities to even eliminate chronic poverty. And yet, this requires considerable inter-temporal allocation of economic resources and employment creation that facilitates sustained investment and economic growth.

Poverty reduction could be achieved by the growth in the income of the poor or improvement in the distribution of income. These two features of the growth process and its implication on poverty indicators is an important analytical approach to decompose the relative
importance of the growth and distribution components in the process of poverty reduction (Bourguignon 2003).

The relative importance of these forces influences the extent to which growth could be translated into poverty reduction on a sustainable basis. It is also important to note that the dynamics of economic growth and its impact on the poverty situation in the country largely depends on the political economic forces that shape the economic and socio-political forces within a country.

The measurement of poverty and its dynamics over time depends on accounting the aggregate output of the nation and its growth rate, the distribution of income across households, the size and growth rate of the population, and a realistic poverty yardstick. These factors in isolation as well as in combination influence the level and dynamics of poverty of a nation over time and across households.

The Gross Domestic Product (GDP) measures the aggregate market value of final goods and services produced in an economy within a year. This concept assumes that all goods and services produced within the national economy have market price and their quantities are known. The GDP measures as accurately as possible and as much as data availability allows the capacity of an economy to generate the necessities and conveniences of life for consumption as well as reproduction purposes.

The GDP includes in its measurement all goods and services produced within a territory of a nation irrespective of who produced them. So long as the production takes place within the nation, it is included in the measurement of domestic product. This implies that some of the output produced in the country may not be claimed by citizens if more foreign companies are engaged in the production process.

Or conversely, a country may have access to consume and save more than its domestic product at least in the short to medium term.

The GDP of a nation could be observed from different perspectives. The share of sectors in aggregate output contribution at a point in time and over the years indicates the structure and relative importance of the main three sectors, namely agriculture, industry and services, in the economy. The experiences of economically developed countries suggests that the rise in the productivity of labor in agriculture allows labor power to move into manufacturing and services sectors without compromising their capacity to provide food, raw materials, and investment resources to the rest of the economy. This process of structural transformation is an essential process in which an increasing share of the labor force moves into industry and services sectors where the scope for increasing productivity is even wider. The higher labor productivity in industry and then services starts to reflect on higher share of these sectors in aggregate output relative to the agricultural sector. Agriculture losses its dominance through its success, not its weakness, for problems in the primary sector could prevent the economy from launching sustainable structural transformation.

The agricultural sector is somewhat unique in that it depends largely on the vagaries of nature and how much the society has managed to tame the unpredictability of natural forces. Societies and the labor force that engage in agriculture lead a pattern of life style that is shaped by the fact that primacy is given to securing the necessities of food and other necessities of life.

Given the size and growth of the national output, its distribution across sectors and households remains a central theme of economic analysis. The relationship between the size and growth of output on the one hand and the distribution of this output across economic agents is a recurrent issue of public policy and the optimum combination of these two forces is defined within the political economy and societal institutions of nations. Country experiences on the extremes of inequality as well as forced egalitarianism suggest considerable economic costs to families. Each country needs to pursue policies towards economic efficiency that rewards economic agents in line with their effort and contributions to national output and yet due considerable needs to be made to maintain social policies that would promote shared and sustainable pattern of income distribution. Whereas forced egalitarianism in poverty has limited

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appeals, extreme inequality in income and opportunity would also have adverse effects on the sustainability of economic growth over time.

The distribution of income across sectors and the pattern of concentration of households in terms of employment and income with respect to sectors provides an overall sketch of how households share out of the aggregate output. It is therefore possible to measure the size of national output that is attributable to the main sectors of the economy, and on the basis of the pattern of sector employment of households, the income share of households. It is plausible to consider that the combination of aggregate income, its distribution across sectors, and the employment pattern of households could provide a way of identifying the amount of income or consumption expenditure of households and their ranks in the overall distribution of income. These are the main ingredients that are useful to depict the pattern of income distribution across households. Additional information on the family size of households would provide us with the idea of per capita economic welfare of households.

The third factor in the arithmetic of poverty is related to demographic issues. Even though the demographic dynamics and processes are somewhat independent and roots in the social and religious beliefs and values, public health, family planning, and the like, there are strong argument to be made about the close relationship between economic and demographic issues. The relationship between the economic status of households and their behavior in terms of deciding or just choosing the size of their family or the survival of the family members had binding elements and tensions. There is a tendency in which poor households to have a larger family size, higher mortality rate as well as ill health, and high illiteracy rate compared with their counter parts in higher income households. Given this demographic feature, it is possible that even egalitarian distribution of income across households may not translate into egalitarian distribution of income across the population. Demographic forces also play a role in the accumulation of human capital among household members in which poor households with large family size would have difficulty in providing the necessary education and health services to enable their children with more chances to escape poverty. These features of early childhood opportunities in education and health seem to have life-long effects on the physical and mental development of children and the life time earning capacity.

It is therefore important to take into consideration the size and growth of national income, its distribution across households and the demographic features of households to accurately capture the forces that shape the incidence of poverty in national economies. In the following discussion, we explore these issues in the context of Ethiopia from both economic as well as political economic perspectives.

**Poverty in Ethiopia**

Ethiopia has a subsistence agriculture dominated economy and most of Ethiopians live in remote rural areas in chronic poverty. The first striking feature of the economy relates to how small the aggregate value of goods and services that is produced in the nation. As of 2010/11, for which we have the latest information of interest, the official statistics of the country reported that the Gross Domestic Product (GDP) was Birr 506.08 billion (about US$31.4 billion\(^{20}\)) (MoFED, 2013). This nominal figure tells a surprisingly real, if not the entire, story about the state and performance of the economy\(^{21}\). The figure represents both market transacted and imputed values of goods and services that were produced within Ethiopia irrespective of who produced them. This of course includes all economic activities undertaken within Ethiopia by foreigners as well as Ethiopians.

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\(^{20}\) The average nominal exchange rate for the year 2010/11 was about Ethiopian Birr 16.12 per US dollar.

\(^{21}\) Economic data can be compared over time only if there is a realistic deflator of nominal values of economic variables. However, nominal values can still provide valuable information and have the appeal of easy interpretation.
In an economy where production is largely oriented towards subsistence and is not intended for market, there would be some degree of underestimation of the overall volume and perhaps value of aggregate economic activity in the economy. All in all, most observers agree that even the official nominal figures\(^\text{22}\), which officials tend to paint a rosier picture, are dismally meager.

The Gross Domestic Product (GDP) at current market price represents the aggregate market value of economic activity, the productive capacity of a nation, and the nominal income of its population. It is a summary indicator of the collective effort and outcome of the productive forces and population of a nation over a period of a year. A nation with a population of more than 90 million people hence managed to produce and depend on only this much suggesting an average income per person of around Birr 6,244 per year (or about Birr 17 per person per day).

A closer examination of the size and composition of aggregate output of the nation essentially exhibits a portrait of a sick and stunted economy whose economic muscles are minuscule while its expanding portion is unhealthy. Agriculture has always been the mainstay of the Ethiopian economy and the source of livelihood to most Ethiopians. This sector is stunted and traps millions in its poverty grip with little chance of escape or improvement over time. It is subsistence oriented, performs on diminishing, smallholdings and fragmented plots, uses primitive technology, dominated by rain-fed farming and operates under an increasingly debilitated natural and policy environment. It is also the central stage where economic, social and political forces engage in a complex web of interaction to dictate the future development path of the sector and the nation. A stunted agriculture is a powerful poverty trap.

The production of national output could be observed from the perspective of three major contributing sectors of an economy, namely agriculture, industry and the services sector. Despite such conventional classifications, however, the three sectors have distinct features and characteristics that would distinguish an economy and its structure. A brief review of the three sectors of the Ethiopian economy provides an important portrait of the national economy. Table 1 below summarizes the main features and compositions of nominal GDP of Ethiopia and its attributes by sector in 2010/11.

<table>
<thead>
<tr>
<th>Description</th>
<th>Agriculture (million Birr)</th>
<th>Industry (million Birr)</th>
<th>Services (million Birr)</th>
<th>Total (million Birr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Value Added</td>
<td>212,577.85</td>
<td>494,35.73</td>
<td>207,853.88</td>
<td>506,079.1</td>
</tr>
<tr>
<td>Sector output share (percent)</td>
<td>45.2</td>
<td>10.5</td>
<td>44.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Labor Force share (percent)</td>
<td>79.3</td>
<td>6.6</td>
<td>13</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 1. Ethiopia: GDP by Economic Sector Classification at Current Market Price 2010/11

Agriculture contributed about 45 percent of GDP of the economy in 2010/11. However, it disproportionately employed about 79.3 percent of the estimated 40.8 million labor force. This is equivalent to about Birr 212.6 billion worth of agricultural outputs. This output had to support an estimated 12.7 million rural households with a population of about 64.2 million and supply food and raw materials for the rest of the national population. This amounts to an average agricultural income of Birr 6,564 per farmer which is equivalent to about Birr 3,307 per capita per year in rural areas (or just Birr 9.06 per person per day!).

\(^{22}\)Macroeconomic data in Ethiopia has lost a significant level of credibility that there is an urgent call for comprehensive data auditing so that the figures can retain any information to indicate the state and performance of the national economy. There was a recent revision of macroeconomic data and the base year as of March 2013 (MoFED, 2013). Even the revision relies on the faulty HCE Surveys to generate the revised series which is unlikely to improve the situation. Observers of the economy are in the dark when it comes to accurately measuring the various components of the national economy.
Here is the center of gravity of Ethiopian poverty. Poverty reduction in Ethiopia requires nothing less than breaking the vicious circle of poverty in the agrarian sector of the economy. In subsistence dominated economy, egalitarian distribution of poverty across households is largely a norm. However, even here, the emergence of landless peasants has occasioned the formation of ultra-poor rural families with extremely dire food insecurity. Such meager level of average income does not provide any room for tolerable inequality for it implies destitution and possible risk of starvation for those at the bottom end of the income distribution.

Arable land scarcity is a real and emerging challenge for the Ethiopian peasantry. Land parcels are getting smaller and fragmented that farmers have to manage on average 3.9 parcels of diminishing fertility (CSA, 2012d). The average arable land per person has declined from about 0.48 hectare per person in 1961 to about 0.17 hectare in 2012 further reducing the carrying capacity of an already fragile agricultural sector. The nation has some uncultivated arable land and yet they are located in areas where human settlement necessitates considerable investment in environmental and health infrastructure. Ethiopia has about a third of its land very suitable, suitable or moderately suitable for crop cultivation, of which about half is very suitable or suitable for crop production so that a relatively minimum external input is necessary for crop cultivation. The rest is not suitable or needs extensive investment and irrigation schemes to be of use for agricultural activities (FAO, 2013). The population is also concentrated in the highlands where almost 89 percent of the population lives in areas above 1500 meters above sea level. In these areas, land holding is too small and too fragmented and soil fertility is declining leaving farmers with recurrent food insecurity. Most of the land is used for cultivating staple food for the family and little is left over for marketable surplus. Recent estimates indicate that two-third of cereal production is used for consumption, and about 14 percent for seeds and only about 15 percent of cultivation sold to the market (CSA, 2012). The future of agricultural output growth hence depends largely on higher crop yield, increased crop intensity, and perhaps to a lesser extent on crop land expansion. It is critical that the productive capacity of the land, especially in the highlands where most farmers live, is addressed in time because rapid population growth, uneven distribution of population relative to arable land, and the shortage of fertile land makes increasing land under cultivation to boost agricultural output hardly feasible.

The agricultural production output and the pattern of output distribution across households leave little room for securing a decent life for any significant proportion of the rural population. Whichever way one slices the agricultural output of the country, it could hardly provide beyond bare survival for the peasant families. And yet, the future hope of improving standard of living in the country highly depends on improving the productivity of peasant agriculture in the country and accompanied by structural transformation of the economy.

The industrial and services sectors contribute about 10.5 percent and 44.2 percent of GDP, respectively as of 2010/11. The two sectors employ 6.6 and 13 percent of the labor force, respectively. This translates into an average income of Birr 19,564 per person per annum. It is hence evident that the non-agricultural sector is relatively more prosperous than the rest and within this sector there are pockets of economic activities with high stream of income and yet with limited capacity to create employment opportunities for the labor force.

Only about 7.9 percent of the labor force is engaged in paid employment whereas the overwhelming majority of the labor force, about 91.8 percent, is self-employed scraping a living and vulnerable to problems associated with unemployment and working conditions in the informal sector. These are practically underemployed or unemployed segment of the population.

The overall shortage and limited choices that underscores the overall feature of the economy has made trading and scarcity induced extra profit to a small segment of the society. Hotels and restaurants and real estate sectors enjoyed a relatively buoyant performance not necessarily linked with value creation but rationing of limited supply and extracting rent from a noncompetitive market. Financial intermediation turned out to be one of the lucrative activities...
reflecting again the relative scarcity of financial resources and a highly repressed financial market in which access to credit and loan is rationed with high access price.

Those economic agents who realize the excessive rent to be extracted from an artificially low interest rate on loans in an environment of rapid inflation made their best effort to secure loans both from the government owned as well as private sector operated financial institutions to generate excessive rent from the economy.

This highly repressed financial sector and extremely distorted market has attracted Ponzi game players in the system whose economic role has been extracting rent and excess profit from the public with the facilitating role played by the government, its policy environment and the financial system. The sector has limited contribution to employment creation and has rather a distorting role in the allocation of limited investable resources to vital sector of the economy where marginal productivity and employment generation would have been much higher than the current level.

The fact that national income accounting has no alternative ways of accurately measuring the economic output of the services sector except the cost of service provision has limited the usefulness of the sector data to describe the level of economic activity. This argument extends to public sector service provision in which the cost of running the activity is considered as the value contribution of the sector under consideration. So long as the sector or subsector is not exposed to competitive forces and value creation in line with the demand in the economy, it would turn into an extractive activity in which the public ends up paying more economic resources especially when the service under consideration has limited substitutes and is essential.

As the previous section demonstrated, the exit from poverty depends how fast the income of the poor grows and how widespread the growth process is to involve most of the households and their members. In this section, we have noted the fact that poverty in Ethiopia is predominant in rural areas and also significant in urban areas. However, the nature of the source of poverty is somewhat different between the two categories. Part of the urban poverty situation could be attributable to lack of employment opportunities and inequality in income across households. In rural Ethiopia setting, poverty is generalized and its fundamental solution lies in improving the productive capacity of the peasantry by removing the bottlenecks that they are burdened with so that an increasing share of them could escape the poverty trap. Leaving the details for later discussion in section four, rural poverty is the central expression of economic challenge in Ethiopia and it underlying forces are economic, political, demographic, natural and institutional. It is hence imperative to pursue multifaceted approach in addressing the problem.

On the Economic Evidence. Assessing accurately the state and performance of a national economy requires a credible evidence and data set. For this purpose, Ethiopia needs to undertake an economic census on the basis of which realistic policies and strategies could be designed. The current set of data is hardly credible to confidently assess the state and performance of the economy and its underlying problems. Addressing the problem of economic data unfortunately cannot be done by correcting part and pieces in the data set. One needs a comprehensive and independent data set on the basis of which further sample surveys could provide updates on the growth of the national, regional, sector, and household economic performance.

Recent official reports widely claim significant reduction in poverty indicators in Ethiopia (CSA, 2012b; MOFED, 2012b). The most recent estimate puts the poverty headcount index to 29.6 percent at national level, 25.7 percent in urban areas and 30.4 percent among rural households (MOFED, 2012b: 7). This implies that the share of non-poor households in the country constitute about 70.4 percent. This is incredibly too exaggerated an estimate to make any economic sense.
How can an economy that is essentially producing an equivalent of merely US$1.13 per capita and per day\textsuperscript{23} can have a dominant 70 percent of its population as non-poor!?\textsuperscript{24}

The base of data for the recent poverty index computation is the 2010/11 Household Income, Consumption and Expenditure Survey (HICES) conducted by the central statistical agency (CSA, 2012b). There are a number of thorny issues to be addressed before one takes the data seriously and make further and perhaps fallacious statements. First, it should be noted that the survey is a major effort with a sample size of 27,830 households. Given its overall sample size, the survey could have provided vital and nationally representative picture of the economic welfare of Ethiopian households. Second, the survey was intended to be nationally representative and as such supposed to implement basic sampling techniques that would yield unbiased estimates of the economic situation of households in the nation. It is therefore a basic sampling requirement to adopt a sound sampling technique that would be as representative of the national household as possible. Third, the sample selection of the survey divided the national sample into three categories in which 10,368 households from the rural domain, 9,216 households from major urban centers, and the remaining 8,448 households from other urban areas were selected. The survey managed to collect data on 10,320 rural households and 17,510 urban households. Fourth, it is apparent that the sample, perhaps by design, was highly biased in favor of urban households.

In a country as predominantly rural as Ethiopia, it is simply not possible to have such a sample structure and expect to get a fairly representative data from the survey.

This compromises the degree of representation of the sample and distorts the true economic picture of households in the country. There are cost and manageability considerations that any survey must take into account when gathering data from a sample frame as wide as the Ethiopian household. However, too much vital data would be compromised by taking the short cut and loading the final sample with urban households. The rural households are only 37 percent of the total sample and almost two-thirds of the sampled households were urban households. A well designed survey with even half the size of the actual sample size could have generated a nationally representative, a better, a more accurate, and a more credible data set from the survey. Fifth, the problem is systematic and has gotten worse over survey rounds. For instance, the share of rural households in the total sample was about 44 percent in 2004/5 HICE Survey and 50 percent in 1999/2000 HICESurvey of a total sample of 17,332 households (CSA, 2007). It is apparent that deliberate uploading relatively well to do urban households in the sample may help to paint a rosy picture of an economy but it might as well distort the true economic welfare status of Ethiopian households.

It is important to recognize the fact that this survey data set is the basis to assess not only the consumption expenditure and income of households but also the pattern of income distribution and poverty in the country. Given the predominantly rural nature of Ethiopian households, the household surveys would have lost pretty little information if it had ignored the entire urban households and focused its resources and efforts in gathering data from rural households that represent the real economic and welfare story of the nation. The damage is serious and such a faulty sampling and surveying approach would leave us with almost no

\textsuperscript{23} This computation uses an average exchange rate of Birr 16.12 for 2010/11 for estimating the US dollar equivalent of the output per capita per day in the country.

\textsuperscript{24} There three possibilities that one can think of: First, there is gross underestimation of the size of economic activity in the country that national income accounts fail to capture but household surveys could; Second, the distribution of consumption expenditure is such an egalitarian that income as well as non-income sources of consumption allow families to escape the poverty trap; and Third, the absolute poverty line, the yardstick to classify families into poor and non-poor, is so ridiculously and meaninglessly low that even unemployed and landless peasants can qualify as non-poor. Ethiopian officials contend that it costs an adult just Birr 1,985 per year (Birr 5.44 per day) to maintain his/her calorie needs (CSA, 2012c, 2012b; MoFED, 2012b).
reliable data to make a credible analysis on the consumption, income distribution, and poverty of the country.

The credibility of economic data in Ethiopia is a major and increasingly daunting problem. There are no easy counterfactual data generation options. As we discussed earlier, the national income account data has its own limitations and credibility problems. And the household survey data is too biased to provide a credible picture. Correcting the problem is not an easy statistical gymnastic and the importance of credible and consistent socio-economic data to make effective policies could not be overemphasized. This is a costly endeavor and yet by far cost effective than gathering faulty information that leaves us in the dark about the state and performance of the national economy. It is amazing how tainted data could be picked up by naïve international technocrats and go through cosmetic make up and disorient even professional economists to understand the workings of the Ethiopian economy.

In this short article, I make a careful reading of the economic data of the country and try to combine different sources in an effort to assess the state and performance of the Ethiopian economy. In the process, I explicitly forward my argument and my assumptions so that its premise and conclusions could be seen in light of the underlying weakness of the economic data and evidence to support the statements and conclusions of the study. I believe such an assessment is overdue for there are a number of unfounded and invalid claims that have been in circulation. Assessment of a national economy by necessity requires credible and consistent economic data. Gathering and reporting aggregate economic data is the responsibility of the government, and in some limited cases non-government, statistics agencies. Economic statistics is in short supply in Ethiopia and whatever data that is available lacks consistency and in some aspects credibility. In this article, the basis of my argument is my readings of the various pieces of data on the Ethiopian economy on the basis of which I endeavor to make my assessment of the economic state and performance of Ethiopia.

The 2010/11 Household Income and Consumption Expenditure Survey reports a fairly egalitarian distribution of consumption expenditure capability across surveyed households. Accordingly, inequality as measured by the Gini-coefficient was 29.8 percent at national level whereas urban and rural coefficients were 37.1 and 27.4, respectively (MoFED, 2012b; CSA, 2012b). Can one trust the data on the pattern of expenditure distribution across households if the sample itself is lopsided as indicated earlier? This is a dilemma and yet household surveys are the most common sources of gathering data on income distribution pattern that closely proximate the actual distributional pattern of economic capabilities across families. Accordingly, I make use of the income distribution data, poor as it is, and combine it with national income account data to assess the poverty situation of Ethiopian households.

Such an approach is not without its due share of problems. However, it has some advantages as well. The size of the national pie to be divided among households and individuals could be approximated by the national output (GDP) and for this purpose I make use of the official figure for 2010/11 (MoFED, 2013). Given this national output level, it is divided by sector to estimate the share of households which is derived from the consumption expenditure survey for 2010/11 (CSA, 2012b). This process enables us to impute the respective share of households by quintile from the national output. Once we have the structure of income distribution by households, we can further impute income per capita by applying an estimate of family size by quintile. This disaggregation and ordering exercise is useful to estimate the level of poverty by combining it with the poverty line threshold.

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25 The World Bank, with all its experts and even country office in Addis Ababa, is the latest victim of such a misreading of the Ethiopian economy and naively endorsing an economic hearsay that does not make economic sense (see Geiger and Goh, 2012; Geiger and Moller, 2013). World Bank should be congratulated for direct endorsement help Ethiopia become a truly socialist economy with authoritarian political regime.
The recent official estimates of inequality in Ethiopia indicate that the Gini-Coefficient was 29.8 in 2010/11 as compared to 30.0 in 2004/05, 28.0 in 1999/2000, 29.0 in 1995/96 and 32.42 in 1981 (MoFED, 2012b; 2007; UN-WIDER, 2008). Urban inequality is reportedly on the decline from 44 in 2004/05 to 37.1 in 2010/11 which is unbelievably remarkable given the high level of urban unemployment, concentration of wealth and business opportunities in few areas, and inflationary pressures that pushed the middle income families into economic hardships.

Table 2 below provides a counter perspective and estimates of the distribution of consumption expenditure capabilities of households in 2010/11 at national, urban, and rural clusters. It is evident from quintile share of households that inequality in consumption expenditure capability is already a serious problem particularly in urban areas. The top quintile households command 61.5 share of consumption expenditure as compared to just 2.36 percent for the bottom quintile of urban households. This indicates a whopping income share ratio of 26 fold between the richest and poorest urban household quintile clusters. The bottom 60 percent of urban households had a combined share of just 19 percent of consumption expenditure capability. Such a glaring urban inequality would put Ethiopia as one of the countries in the world with extreme inequality accompanied by widespread poverty. In the rural areas, inequality is relatively low but it is essentially egalitarianism in poverty than in prosperity because almost all rural families struggle for survival near bare subsistence.

<table>
<thead>
<tr>
<th>Quintile/Categories</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethiopia</td>
<td>0.0799</td>
<td>0.1278</td>
<td>0.1706</td>
<td>0.2265</td>
<td>0.3951</td>
</tr>
<tr>
<td>Rural</td>
<td>0.1034</td>
<td>0.1555</td>
<td>0.1977</td>
<td>0.2400</td>
<td>0.3034</td>
</tr>
<tr>
<td>Urban</td>
<td>0.0236</td>
<td>0.0614</td>
<td>0.1057</td>
<td>0.1942</td>
<td>0.6151</td>
</tr>
</tbody>
</table>

Table 2. Ethiopia: Pattern of Distribution in Consumption Expenditure by Quintile 2010/11 based on author’s computation from (CSA, 2012b, 2012c). The magnitudes are consumption expenditure share of households.

Before we discuss the implication of such pattern of income distribution on the poverty indicators, it is important to establish some salient features of the Ethiopian households that the 2010/11 survey, as officially reported by the authorities, seem to suggest. It is apparently puzzling to note that there is no consistent reporting even on the basic characteristics of the households in the 2010/11 survey. The summary report of the households by quintile for the same sample group is quite divergent as reported and no explanation was provided for changing the figures even if it is a significant adjustment or editing (see CSA 2012b the analytical report and CSA 2012c for comparison). The indicators of the household expenditure levels should be seen with this reservation and the accurate picture would remain inaccessible so long as the primary data of the survey remains not in public domain for detailed examination.

It is also evident that Ethiopian households, irrespective of their income status, spend a significant share of their household budget on food items and about 60 percent of their daily calorie comes from cereals and related products.

This might be related to the food culture of the population but it might as well indicate the stress under which household budgets have to be managed. The latter is more likely the case. Even the top quintile group generates less than 1 percent of its net calorie requirements

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26 In a country where eating meat or egg is such a luxury, the affordability of food is increasingly a concern even among families in the higher quintile of income. I live in a country where the cost of living is one of the highest in the world and yet a pack of 10 eggs could be purchased approximately at US $2 (or Birr 32 or Birr 3.2 per piece). In Addis Ababa, according to Access Capital price database, the price for 2011 was about Birr 2.30 per piece. Note that an egg per day for a family of five costs nearly Birr 4200 per year! (Incidentally, this is about 10 percent of the average household
from meat and meat products or other delicacies of life not because of dietary preferences but simply because they are not able to afford such basics of life.

<table>
<thead>
<tr>
<th>Household Quintile</th>
<th>Household share (Population share)</th>
<th>Average household expenditure in Birr</th>
<th>Average Family Size</th>
<th>Kcal per capita per day (o/w cereals share)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(percent)</td>
<td>(share in income)</td>
<td>National (Rural)</td>
<td>(percent)</td>
</tr>
<tr>
<td>1</td>
<td>20 (14.5)</td>
<td>8,496 (7.99)</td>
<td>3.45</td>
<td>1829</td>
</tr>
<tr>
<td>2</td>
<td>20 (17.8)</td>
<td>13,593 (12.78)</td>
<td>4.24</td>
<td>2157</td>
</tr>
<tr>
<td>3</td>
<td>20 (20.2)</td>
<td>18,136 (17.06)</td>
<td>4.82</td>
<td>2302</td>
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<tr>
<td>4</td>
<td>20 (22.3)</td>
<td>24,087 (22.65)</td>
<td>5.31</td>
<td>2507</td>
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<tr>
<td>5</td>
<td>20 (25.2)</td>
<td>42,000 (39.51)</td>
<td>6.00</td>
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</tr>
<tr>
<td>Ethiopia</td>
<td>100 (100)</td>
<td>21,263 (100.00)</td>
<td>4.76 (5.059)</td>
<td>2380 (60.74)</td>
</tr>
</tbody>
</table>

Table 3. Ethiopia: Household Expenditure and Features by Quintiles in 2010/11 based on author’s computation from (CSA, 2012b). Average family size is computed indirectly from Tables B1.1-B1.3. Population share estimate was computed from Table A3.1. Net Kcal estimates are from Table B10.1b.

Combining the data from Tables 1 to 3 above, it becomes evident that there is gross underestimation of the extent and depth of poverty in the country. The economy as it stands now simply could not support a decent living standard for the majority of Ethiopians with an exception to a small segment in the urban areas that enjoy a relatively high command of consumption expenditure. There is an apparent contradiction in the poverty indicators of the country and the size and distribution of national output in the country. The possible sources of this contradiction are the measurement of total output of the nation, the number of households or population size, the distribution of income across households, or the poverty threshold that is used as yardstick to measure the poverty rate. So long as the poverty threshold is ridiculously low, it is possible to generate a poverty rate that has little resemblance to reality.

If one takes the official poverty statistics and the claims of the government at face value, paradoxically enough, it costs only 2.07 percent of GDP to eliminate poverty in Ethiopia by 2010/11. I estimated the average shortfall of households’ consumption expenditure from the poverty line given their class mean income and distribution below the poverty line. If the cost of eliminating poverty in Ethiopia were this much relative to GDP, it would have signaled a glorious era for Ethiopia and Ethiopians. It would have finally provided the last blow to a core national problem that has humiliated generations of Ethiopians. Such an affordable cost could have been financed domestically by levying surcharge, say honor tax that could have been voluntarily contributed by citizens who want to reclaim their dignity and close that chapter of their history where foreign alms and food donation always kept their dignity low. However, the truth about the extent and depth of poverty in Ethiopia is not honestly and realistically measured in the country and public policy cannot be designed and implemented in such a murky situation.
**Policy Issues and Strategies**

The issue of poverty could be seen from the perspectives of the process of production of national output, the distribution of this national income across households and sectors, and ensuring families earn income that is sufficient enough to command the necessities and conveniences of life. The impediments to poverty reduction are closely related to these factors and the underlying variables operating within a political economy setting of a nation. The underlying forces of poverty and its dynamics in Ethiopia have both production inefficiency and distributional inequity characteristics compounded by demographic features.

Addressing the problems of poverty in the country therefore require efforts to improve production allocation efficiency, productivity, investment in human and physical capital, improving the distribution of resources and opportunities, and undertaking sound institutional and political including constitutional reforms toward good governance.

**The Poverty Challenges.** The central economic and poverty challenge in Ethiopia is how to transform the agricultural sector so that it would not trap millions of Ethiopians in its low level equilibrium and poverty. What does it take to achieve such a structural transformation in agriculture? Improving agricultural productivity requires investment in physical and human capital and improved farming practice and technology with which farmers operate their farm or livestock. Ethiopian agriculture is dominantly smallholding peasant farming in which the decision making behavior of millions of vulnerable peasants, in combination with natural forces, determines the aggregate output. Production is dependent on the vagaries of nature and this dependency has not declined over decades. What has changed is the demand for farmland because of the rapid increase in population and demand for land to produce food for household consumption.

The vicious circle of poverty in rural Ethiopia is so vicious that investment in capital and improved farm inputs could not be generated from savings of farm households. Because of the combined size of such smallholder farmers, the only feasible way that they could improve their yield is through investment on their land by their labor effort such as building terraces, plowing their parcel of land well, and attending the weed and related production processes. Such a continuous effort, however, could not be sustained when peasants have no security of ownership of the land. The best and sure way of getting security of land is private ownership of land which remains the main and perhaps only means of production. This calls for an urgent action to ensure security of land and ownership right of farmers. It is recognizable why a minority political regime insists on state ownership of land, as any coercive regimes do, because depriving the peasants off their right is the sure way to coerce and control them. This political rationale, however, is depriving the peasants and the nation to transform the agricultural sector. The political imperative is blocking the economic development objective.

It is only under secured land ownership that farmers would finally be making the necessary investment to improve the fertility and productive capacity of their land. Land must never be politicized but as a course of political imperative, successive political regimes in the country have used land to strip the rights of peasants to control the most important factor in their production process. There is no compelling economic reason to oppose private ownership of land and the excuses for maintaining the status quo of land ownership by the state are at best spurious. The main bottleneck to address this issue is not lack of evidence in support of legalizing private ownership of land but the fact that land is an effective means of political control and coercion of the peasantry. So long as the peasants are not free from such a shackle, there is little hope of transforming the agricultural sector and by extension to generate sustainable economic growth and development of the national economy. Addressing the issue of land ownership needs to be accompanied by further reforms and efforts. The agricultural sector is burdened by accumulating problems over decades and hence needs unburdening. First, there is widespread underemployment of the labor force for lack of land or off-farm employment opportunities.
In this regard, it is vital to encourage rural based small scale processing, manufacturing, and industrial activities that could create seasonal as well as permanent job opportunities. Moreover, infrastructural activities that could improve the social capital stock of the nation could have multiple benefits both in creating job opportunities as well as in improving the vibrancy of the rural sector in generating income for households. Second, gradual and yet steady migration of the labor force from farming into other activities is necessary for the farmers to secure enough land and capital to work with. Urbanization accompanied by small and medium scale industrial activities should provide an outlet for the younger generation of rural residents to find alternative ways of employment opportunities instead of scrambling on an already fragmented, small and less fertile farm land.

This process of labor mobility could be facilitated by providing basic training in skills that are suitable for industrial jobs. This does not necessarily be the responsibility of the public sector but also the combined initiative of the private sector with apprenticeship to young rural labor force.

Third, the demographic burden on the agricultural sector is considerable and measure to pursue realistic population policy is imperative. As of 2011, 56.9 percent of the population is younger than 20 years old (32.4 percent of the population younger than 10 years old). This indicates that the majority of the current population was born after the current political regime assumed power in 1991. This suggests one or more facts. The population is growing extremely fast supported by high birth rate, better survival rate of those born, and excessive death rate of those born before 1990. Decision on the size of the family ultimately depends on the choices, beliefs, and responsibilities of individual households. The long term solution to this intractable problem is when families take responsibility and bear the consequence of their decisions instead of externalizing their decisions to the community and society at large.

Fourth, those who survived the hostile economic and health childhood environment made it barely. 34 million (about 40 percent of the total population) are undernourished during 2010-12 compared to 35 million (48 percent) during 2004-6 and the figure for 1990-92 was 34 million (68 percent) of the estimated population of about 50 million (FAO, 2013). Despite the seemingly declining percentage, the number of people who are undernourished, debilitated, stunted, and face premature death is barely changing over the past two decades. Still, most of Ethiopian children are born to languish in destitution and debilitating poverty.

Fifth, agricultural investment in smallholders farming comes only from the peasants themselves and could not be undertaken by external forces, including the urban sector, foreign direct investors, or the government. The only sustainable source of investment comes from the deliberate decision of smallholder farmers undertaking improvement in their land management and making small but vital investment in their production system. The main source of such investment is the annual output of the respective farmers perhaps accompanied by credit schemes that would enable the poor farmers to introduce appropriate technology in their farming practice. This process could further open market for small scale industries that could potentially attract and employ farmers without sufficient land to work in activities that service the smallholder farmers. Local entrepreneurs may seize this huge business opportunity by developing simple, appropriate and affordable farm technologies that could improve productivity of the farmers and increase their marketable output which would be the ultimate source of their investment.

Six, there is serious mismatch in concentration of population settlement in the highlands and the distribution of current and potential croplands in the lowlands. This calls for voluntary and gradual migration of families where opportunities are attractive.

This process is complicated in practice, as recent crisis in the south west indicate, and again the main culprit is politics rather than social or economic. The national economic space has been fragmented into enclaves of ethnic boundaries that do not allow a more optimal and efficient allocation of economic and human resources across the country.
Agriculture has been saddled with serious problems of lack of access to land, ownership right of the peasants to their land, deterioration in fertility, soil and land degradation, lack of access to credit services, poor agricultural and marketing infrastructure, and dependency on the vagaries of nature. All of these factors exert adverse influence on the growth of the sector and hence the national economy. The sector is geared to subsistence and even then only half of the peasants are currently self-sufficient in cereals. The ever-dwindling plot of farmland is simply not enough to produce sufficient crops for subsistence. As a result, the rural population has increasingly become net buyer of food items. Only about 20 percent of the peasants, mainly from grain surplus regions, generate nearly 80 percent of marketable surplus in the country. These indicators strongly suggest that the peasants are increasingly subjected to food insecurity over the years. The price of food items has been increasing and lack of political leadership to undertake appropriate policy action in time, coupled with external developments and shocks, might foreshadow the era of increasing food prices and further hardships for net food buyer peasant households and food deficit regions in Ethiopia.

The poverty situation in Ethiopia exhibits a number of unique features and characteristics that reflect the performance of the national economy, the dynamics of population growth, the distribution of opportunities, subsistence dominated agricultural sector, and the policy environment that hampered the realization of the economic potentials of the nation. These features do not allow a sustained rise in the productivity of labor. Not only is productivity very low but also it has been stagnant over time. This is particularly the case in the agricultural sector where the per capita food production has consistently followed a declining trend since its peak in the 1970s (World Bank, 2005; Diao, 2004).

Addressing the problems of poverty in Ethiopia requires setting the priorities in order and undertaking appropriate measures to improve the capacity of the economy to move out of the impossibility frontier it finds itself. The overall hostile investment climate, institutions and attitudes set a hurdle for sustained improvement in the productivity of labor. This problem is widespread and leaves its mark both in agricultural and industrial activities. An average industrial worker in Ethiopia, for instance, is twice less productive than their counterpart in China and 80 percent less productive than workers in Bangladesh. This stark difference in productivity of workers is largely attributable to total factor productivity differences (77 percent) whereas the remaining could be accounted for by differences in intensity of physical and human capital per worker (World Bank, 2005). Addressing the overall problems in the business climate and removing the burden of uncertainty, unpredictability, favoritism, and poor infrastructure for local entrepreneurs remains a critical problem calling for comprehensive policy reforms.

Poverty Reduction Strategy. Ethiopia formally embarked on anti-poverty reduction strategy in 2002 and the government put its objectives and policies in its poverty reduction strategy paper –Ethiopia: Sustainable Development and Poverty Reduction Program- which assesses the poverty situation in the country, the sources and constraints to economic growth, and outlines measures to address them (FDRE, 2002). This was followed by a revised policy plan to accelerate and sustainable development to end poverty (PASDEP) (FDRE, 2006). The revised policy stance recognizes the importance of non-agricultural sector in promoting overall growth and in addressing pressing poverty problems. Ethiopia is currently undertaking yet another ambitious economic plan within the framework of poverty reduction strategy. The Growth and Transformation Plan (GTP) is operational for 2010/11 to 2014/15 and envisages a rapid economic growth and structural transformation with emphasis on industrial development (MoFED, 2010). The core of the strategy is to achieve an average annual real GDP growth rate of 10 to 14 percent per annum with an estimated cost of US$ 57 billion. The country has had no shortage of lofty and unrealistic plans in the past and yet all of them failed to address the fundamental problem of the economy.

Ethiopia and its population have a huge potential to overcome the challenges of the poverty trap and undertake sustained economic growth. The possibilities are immense given the
The fact that the level of economic underdevelopment and the gap to the rest of the world economy is so huge that considerable catch up process could be initiated and sustained. However, this demands serious reforms to dismantle the hostile economic policy and repressive political environment in which the millions of hardworking Ethiopians are struggling to earn a decent living.

This is most apparent in agriculture but would also apply to the rest of the economy to a lesser extent. Agriculture remains to be dominant for a foreseeable future in the economy and it is here that the most pressing challenges to poverty reduction concentrate. Ethiopian agriculture is burdened by lack of strategic policies that could transform the sector and enable the farmers to play important role in the economic development endeavor of the nation. The sector and peasants have little security in one of the core means of production, farmland. The current Constitution is and remains to be a central source of insecurity that has institutionalized and deprived peasants off the right to ownership of their productive asset and country divisions based on ethnicity instead of provinces. It is necessary to remove the monopoly of land ownership from the grips of the state. The government is a notorious single landlord that uses land to exercise political control and coercion of the peasantry. This is a burdensome rent that the government and by extension the political party in control extracts from the poor peasantry.

The issue of ownership of farmland could not and should not be postponed given the pressing challenges in the sector. The current argument against or in favor of private ownership of land in Ethiopia largely misses the essence of the problem. There is no justifiable and compelling economic argument against the private ownership of farmland by the peasants. There is no more solid security to farmers than owning their essential productive asset. Ethiopian farmers have little else except rudimentary tools and perhaps oxen to plough their land. Farmers could not protect themselves from political and economic risk by holding security certificate or the blessing of the political elite. The current Constitution prohibits private ownership of land. This is unfortunate and tantamount to enslaving the peasantry under the dictates of the state. The recognition of private ownership of land does not necessarily suggest the abolition of other forms of land ownership such as community or public ownership of part of the arable land in the country. The essential problem is when private ownership is constitutionally prevented and farmers are left with the ever insecurity to earn a living from their plots. One of the arguments that opponent of private ownership often forward is farmers would sell their land and would migrate to the cities creating further pressure in the already high unemployment rate in the urban centers. This argument is weak at best and does not appreciate the economic rationality of farmers and the value farmers attach to their land. Ownership of land in a poor society is beyond owning a piece of an economic resource. It is about freedom and rights to earn a living through hard work and a precondition for sustained investment effort to enrich the land and its supporting capacity at least by exerting more labor inputs and small investment that sustain its fertility and productivity. Productivity of labor is consistently higher and more sustainable when the owner (and his family) operates the land. Ownership is the ultimate security and an insurance to command the output from the harvest.

Land reform could be complemented by measures that ensure an orderly land market regulation that protects farmers from speculative manipulations and concentration of farmland ownership. A number of countries pursued rules and regulations that stabilized the agricultural land market and make sure ownership remains within the active cultivators. Land transaction could be limited to exceptional cases and with the approval of the local farming communities. Such simple and transparent measures could ensure the stability of the land market and dries up the rent seeking behavior of economic agents who seek administrative allocation of land with modest or no payment. This regulated land market also serves to value land that reflects the prevailing market situation and the overall demand and supply of farmland in the economy.
Third, there is a concerted need to reduce the dependence of farmers on rainfall by expanding support services for small-scale irrigation systems and water management practices. This could increase productivity as well as equip the farmers with strong risk management capabilities. It is also time to promote support services for adaptation of appropriate farming equipment that fit smallholder farming. The supply of modern farm inputs and the integration of agricultural marketing networks with suitable infrastructure and services with the participation of private sector delivery of such services on efficient and competitive basis need to be promoted. Increase in the productivity of labor in agriculture and its generation of marketable surplus are important enabling factors for industrialization. This critical contribution of agriculture for industrialization is possible only after the problems in the sector are addressed in time. Labor productivity in the non-agricultural sectors seems higher and a sustainable reallocation of the labor force from agriculture through education and training of the youth in the rural sector, building an enabling environment for the industrial sector to effectively use investment resources and generate employment opportunities, reducing the disguised unemployment both in rural and informal urban areas are important steps to address the problem.

The rural based agricultural sector is the most dominant and is likely to remain as such in the Ethiopian economy for a foreseeable future. However, a successful transformation of the subsistence agrarian sector requires additional measures to tame the pressure on the sector by improving the employment creating capacity of the industrial and services sectors. Pursuing effective industrialization policy is not only necessary but also the only way to ensure the burden of population pressure in rural areas and allowing an increasing share of the labor force earn its livelihood from industrial and services sectors. In this respect, the development of basic industries with extensive backward and forward linkage coupled with the establishment of small-scale labor-intensive industries becomes critical and feasible. The industrial sector is weak and yet with considerable potential not only to improve overall productivity but also generate employment opportunities for the poor with sufficient human capital and training to take advantage of the opportunities. It is only a vibrant agricultural sector that can pave the way for manufacturing and industries to emerge. When things fall apart in agriculture, as the case of Ethiopian agriculture indicates, its consequence reaches the entire economy.

**Concluding Remarks**

Poverty is a central public policy challenge in Ethiopia. It has multiple features and causes related to production, distribution, institutional, policy and political factors in the system. Poverty in Ethiopia could not be alleviated sustainably without fundamental political and institutional reform toward democratic good governance. Sustained poverty reduction in the Ethiopian setting could be achieved only if the bottlenecks and insecurities are removed from the shoulders of the peasantry which constitutes the overwhelming majority of the population. Transformation of the agricultural sector from poor productivity and recurrent crisis is the only way out of the current poverty trap. And such a transformation in turn requires liberating the peasantry from hostile policy environment in which the right to own and develop its land and economic activities is recognized and legally protected.

Impediments to poverty reduction emerge from structures and institutions that limit the capacity of the economy to achieve sustained and shared economic growth and engage the poor in more productive endeavors. These forces limit the accumulation and efficient allocation of physical and human capital, the expansion of the productive base of the economy, the innovation and adaptation of new technologies in production.

Poverty in Ethiopia is deep and endemic. Such a situation could prevail for generations only when hostile political, economic, social and institutional impediments in the country suffocate the productive energy of the population. The moderate rate of economic growth in recent years and the deteriorating pattern of income distribution in the country suggest that significant poverty reduction, let alone elimination of chronic poverty, would be unlikely without
fundamental political and constitutional reforms. The problem could get even worse given the fact that population is growing rapidly and most children are born into poor families. It is therefore necessary to take timely action to accelerate the accumulation of physical and human capital, maintain and build upon endogenous social capital, undertake comprehensive policy reform measures that promote market forces and private sector development, pursue institutional reforms to reduce hurdles to full utilization of the potentials of the economy, and implement inclusive economic and political policies. These measures coupled with prudent social policies that cultivate the environment for collective prosperity could enable the system to reduce chronic poverty and put the economy on a sustainable development path.

References


The Lost Opportunity for Ethiopia: The Failure to Move toward Democratic Governance
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Abstract
During the critical five year period leading up to the velvet revolution and the overthrow of Haile Selassie’s regime, there were missed opportunities to bring about peaceful change in Ethiopia’s governance. This paper analyzes the events of this period that led to the rise of the Derg and the revolutionary changes that followed and speculates on when strategic steps could have been taken to avoid the catastrophic events that ensued in 1974.

The End of the 1960s
In early 1969, Haile Selassie was at the apogee of his power exercising undivided, absolute, single-handed rule. The governing structure, a tightly centralized state, continued apace. Government had grown so that there were more institutions--bureaucratic, financial, political, and military--created by Haile Selassie and staffed with personnel chosen by him. Ministries could carry out assigned tasks, but all were under the supervision of the Emperor who had designed them to concentrate power in his person. Haile Selassie, it was, who authorized major decisions of the government since no one else had authority enough to do so. He even was involved in less significant matters too-- meeting requests of petitioners, distributing charity, and proffering advice or reproofs to individual subjects.

In the descriptive term of U.S. President George W. Bush, the Emperor was “the decider.” Decisions emanated from the palace. The organization chart of the governing process remained simple: a giant arrow going out from the central box representing the monarch to all ministries and other official entities, all of whom eventually were beholden to Haile Selassie. The system, in 1969, was working. The nation enjoyed internal peace, and there was nothing originating in the government that could be considered highly threatening to the regime. The Emperor seemed confident that governing would continue as it had for almost 40 years under his enlightened rule.

In his domestic rule, the paternalistic Emperor made just enough change in his masterly system of divide and rule to keep competing forces in delicate balance. The landed aristocracy, the church, the mainly Western-educated younger technocrats, and the military all fell under the overriding shadow of the personality of Haile Selassie. The Emperor could co-opt most of them through preferential treatments of grants of land or lucrative appointments. The privileges and interests of the nobility were protected in exchange for their support of royal absolutism. The Crown Council and feudal lords might grouse about the assertiveness of the modernizing elite with its new ideas and promotion of centralizing government operations, but they were content so long as the IEG kept conservative ideas in policy and in parliament at the forefront. The educated elite, growing in number, found Haile Selassie too tolerant of traditionalists but were mollified by such successes as the Emperor allowed them. The monarch did not strive for an open society based on merit rather than on personal allegiance and the sharing of power.

The Ethiopian Orthodox Church remained a pervasive influence in society but its political significance was in decline. The military, having demonstrated its dangerous potential during the attempted coup of 1960, received special attention from Haile Selassie, who reinforced his control over the armed forces that were divided into separate and competing groups. The Emperor fostered interpersonal as well as inter-unit rivalries and mutual suspicion to keep the military from being capable of acting in a concerted fashion. Militant ethnic forces, despite occasional flare-ups, were kept under control. The great majority of the people, the peasants and laborers, were loyal supporters of Haile Selassie as the revered emperor who ruled by tradition and the will of God. They saw the stability of the government as due to the benevolent reign of Haile Selassie and a long period of peace. All of the groups were subsumed into the economic development of the country—enough to satisfy progressives who clamored for change but not too much to
antagonize traditional aristocrats and the Ethiopian Church, who preferred the status quo. What Haile Selassie failed to grasp was that the modern measures he took to consolidate his absolutism, such as the establishment of the national army, modern education, and a hierarchical bureaucratic system, would create new interests and demands that would be less accepting of the limitations of autocracy. Gradually, the Emperor’s reforms were being perceived as inadequate by an increasing number of the country’s young people. In each succeeding year, the government’s inability to remove the causes of social discontent and the increasing reliance on the military demonstrated the growing fragility of the imperial regime.

The loudest dissidents in Addis Ababa were radical student activists at Haile Selassie I University, who were critical of the regime and espoused Marxism, the de rigueur philosophy of young protesters at that time. Young intellectuals (and unbeknown to the palace, some bureaucrats and junior officers in the military) were beguiled by the alleged quick solutions for Ethiopia’s chronic problems of poverty, ignorance, and disease through Marxist-Leninism. To them, the moderates’ slow but steady development strategy of demonstrating the virtues of freedom of choice and self-determination and explaining the accomplishments of democracy and capitalism lacked immediacy. In metropolitan areas the Soviet-financed Crocodile Societies were winning the hearts and minds of the students who lacked the maturity to appreciate the meaning of Jefferson, Madison, Mill, and Lincoln. Some conservatives accused Haile Selassie of being overly indulgent of them, but the Emperor had deftly put them in their place before and no one thought they posed an unsolvable problem.

The annoying insurgents in outlying provinces, armed with money from Somalia and radical Arab states, were held at bay by successful Ethiopian countermeasures. In the face of the might of Ethiopia’s 40,000 man army, the largest, most efficient, and best trained and equipped in sub-Saharan Africa, the Emperor’s foreign neighbors had backed down from aggressive behaviors. Somalia, under Prime Minister Mohamed Ibrahim Egal, sought détente with the IEG and was reducing aid and encouragement to ethnic Somalis in the Ogaden. In 1969, the insurgency in Bale had reached its peak and was defeated. Even Eritrea was quieter than it had been a year before. Military muscle came at a price, however. Money for defense remained the largest single item in the IEG budget, about a quarter of the total.

In foreign affairs, Haile Selassie was intent on maintaining his nation’s sovereignty and the boundaries of Greater Ethiopia. Collective security was his idée fixe, with the United Nations as guardian of the concept. He garnered accolades as an elder statesman in founding the OAU and as a moderating force in mediating disputes between nations. He stood four-square in urging an end to colonialism, especially in Africa, and encouraged Pan-Africanism and African unity. The Emperor even managed to be an active player in the nonaligned movement at the height of the Cold War, trying to play down treaties with the United States and the presence of U.S. bases in his country while maintaining cautious relations with the USSR and Warsaw Pact countries. He further burnished his credentials as a world leader with continuing international travel in which he reveled. Since the 1950s, Haile Selassie had effectively cultivated the financial, military, and diplomatic support of the United States, a most beneficial and necessary arrangement for the IEG and one that the Emperor was sure would endure so long as he held the trump card of landlordship of Kagnew Station.27

His travels around the world raised Ethiopia’s international image and kept him an international celebrity. His prestige in the United States was demonstrated in July 1969, when the Emperor was the first African leader invited to visit the White House by his old friend President Richard Nixon after his election in 1968. Haile Selassie was reassured that the new administration would continue to hold Ethiopia as its closest friend in Africa. In international politics, the Emperor was concerned with continuing crises in the Nigerian-Biafran Civil War and in the


http://scholarworks.wmich.edu/ijad
Israeli–Egyptian War of Attrition. Both crises were significant for Ethiopia: Biafra involving an ethnic group breaking away from a sovereign nation and the Middle East war engaging Haile Selassie’s ally, Israel. Both would grind on until military might rather than diplomacy would force “solutions”—Biafra crushed and the United Arab Republic (UAR) and Israel in stalemate. The UAR under Nasser, at the time a client state of the USSR, was of special significance for it served as a base for Soviet vessels to penetrate the Red Sea and become an Indian Ocean power. The Emperor felt the Soviets with their growing influence in Somalia, Sudan, and parts of the Arabian Peninsula were the greatest danger to Ethiopia. To combat this threat, Haile Selassie sought increased U.S. military aid with state-of-the-art armaments and equipment. The Americans reluctantly complied, but never with as much aid delivered with such alacrity as the Emperor desired.

The relative calm around the palace in early 1969 was shattered later in the year by military coup d’états in neighboring states. Anti-Western, Soviet-friendly socialist regimes were installed in the Sudan by Gaafar Nimeiry and in Somalia by Major General Siad Barre. Once again, tensions on Ethiopia’s border were exacerbated by Soviet-supplied arms to hostile neighbors who threatened war and aided rebels in Eritrea and the Ogaden. Indeed, the activities of the revitalized Eritrean Liberation Front (ELF) caused the IEG to declare martial law throughout Eritrea.

In Addis Ababa, as the decade of the 1960s concluded, members of the modernizing elite began talking openly of the need for change in government policies and were clamoring for the end of the U.S. military presence at Kagnew. Student demonstrations and strikes frequently interrupted instruction in the university and secondary schools. Anti-American sentiment extended to the harassment of Peace Corps teachers, who were demonized as part of U.S. support for the reactionary regime. The IEG appeared unperturbed by the muted but growing dissatisfaction with the Emperor’s arbitrary rule and the slow progress of modernization.

Chief among dissidents’ demands was land reform. The Emperor had attempted to address this problem earlier in the mid-1960s by introducing a modern, progressive tax that included registration of land. This effort ran into strong opposition, especially in Gojjam where a landowners’ revolt was suppressed. The revolt, however, succeeded in undermining enforcement of the tax and encouraged other landowners to defy Haile Selassie. Conservatives in the Imperial Court and Parliament balked at paying taxes on their substantial land holdings, and the result was that the IEG was strapped with remarkably low levels of government revenues from domestic sources. National development lagged, damaging the standing of the government and fostering resentment among the peasants. Dissidents played upon this resentment with rhetoric about the need for equality among people hoping to broaden their base of support beyond the educated elite. Efforts to weaken trade unions, legalized since 1962, also hurt Haile Selassie’s image.

At 78 years of age, Haile Selassie was slowing down, and he no longer ruled as firmly as he had only a few years before. Those who worked closely with him noticed frequent senior moments interfering with his daily activities. In the past, he had survived by ignoring problems or suppressing them. The hubris and self-confidence of the king of kings, who was so sure that he knew what was best for the country, led him to benign neglect of his duties to govern. But a new, better educated elite was becoming outspoken in its criticism of the Emperor’s gross disregard of domestic matters and his remoteness from their people. In the face of these frustrations, the Emperor increasingly left domestic issues in the care of Prime Minister Aklilu Habte Wold while he focused on foreign affairs.

The 1970s

In February 1970, he played host to U.S. Secretary of State William P. Rogers, who was on the first ever diplomatic tour of the African continent by an American secretary of state. In Addis Ababa, the Emperor again implored Rogers for more military aid in light of the increasing threat to Ethiopia’s national security posed by hostile neighboring nations and the rejuvenated ELF. The

28Vestal, Lion, 171.
Secretary replied that the solution to Ethiopia’s problems was faster paced change and reform rather than more arms.29

To mute criticism of the IEG’s slow pace of reform, the Emperor recruited foreign advisors from Harvard and the World Bank and empowered younger men to take leading roles in economic planning and management. He also updated the investment law and planned to establish an investment center in Addis Ababa to attract foreign investors.30

In September, Haile Selassie played a leading role at the Third Nonaligned Conference in Lusaka, Zambia. The Emperor, a founder of the movement, presented a proposal for specific measures against Portugal, South Africa, and Rhodesia if they did not conform to UN resolutions on decolonization and racial discrimination. He noted that superpowers are “no longer overwhelming” and that the third world had changed from a position of “fear of involvement” to one of taking an “independent approach” on important issues.31

On October 1, 1970, Haile Selassie attended the tumultuous funeral of President Gamal Nasser in Cairo, and later in the month, he went to New York to speak at the historic 25th anniversary session of the UN General Assembly. On October 23, the Emperor, referring to his disappointing experience at the League of Nations, said the UN was a vital organization, adequate to its task if the members so willed it. Haile Selassie, along with 17 presidents and 28 prime ministers, attended the next day’s closing session that condemned colonialism and racism in southern Africa and adopted a 10-year program for the development of poorer nations. He enthusiastically joined in the General Assembly’s unanimous declaration rededicating UN members to the charter and calling for peace, freedom and an end to the arms race.

In Washington, Haile Selassie was among 31 chiefs of state and heads of government who attended President Nixon’s White House dinner in honor of the UN’s Silver Anniversary. As the longest reigning ruler present, the Emperor responded to the President’s call for his guests to work together for peace. Haile Selassie urged the world leaders to support the aims of the UN even though it had not fully lived up to its earlier expectations. In a private meeting with Nixon, the Emperor requested more U.S. military aid to counter the threats to his nation’s security posed by the growth of Soviet and Cuban military activities in Somalia and the growing insurgency in Eritrea. Nixon said he would study the military situation, giving full weight to the Emperor’s proposals.

In the following fiscal year, however, U.S. military assistance was reduced from $12 million to $10.8 million reflecting the tighter fiscal restraints brought on by the war in Vietnam.32 Also at that time, the facilities at Kagnew were being made obsolete by satellite technology, and the Nixon administration was reviewing the value of the listening post in a more technically sophisticated military establishment.

The Emperor’s role in international politics was still so highly esteemed by President Nixon that he sent Vice President Spiro Agnew to Addis Ababa in July 1971 to inform Haile Selassie in advance of a significant change in U.S. policy: the diplomatic recognition of the Peoples Republic of China (PRC) by the United States. Nixon encouraged the Emperor to advance Ethiopia’s interests in the PRC.33 On 8 October, Haile Selassie went to Peking to meet with Chairman Mao and Chou En-lai. There, they successfully negotiated a Trade Agreement and an Agreement for Economic and Technological Cooperation. In return for establishing diplomatic

30Vestal, *Lion*, 176.
32Vestal, *Lion*, 176.
relations, Mao promised to end support of Eritrean insurgents and began an economic aid program, including construction of an east-west highway.

In domestic governance, in 1971, the Emperor continued to maintain a delicate balance of competing forces within the nation. The Ministry of Education caused a stir by publishing "The Education Sector Review," a report prepared by high level consultants and funded by the World Bank, which aroused general indignation. Critics of the Review claimed that its recommendations blocked the path to higher education for the country’s poor. So great was the uproar over the document, the Government eventually announced suspension of the Review, an indicator that the IEG was responding to pressure from the dissidents.

In November, 1971, Haile Selassie was one of eighty world leaders in Paris attending the state funeral of Charles de Gaulle at Notre Dame. By that time, the United States had almost completed its 1960 agreement to equip a 40,000-man Ethiopian army. About half of Ethiopian armed forces were in Eritrea keeping ports and communications lines open. The ELF regularly challenged the IEG’s authority in outlying rural areas. The enduring strife in the north, led the Emperor to continue pressuring the United States for assistance to fully maintain the army and also provide several million dollars for additional requirements.

More significant than the need for arms for Haile Selassie was the disaster unfolding to the north of his capital, the Wollo famine. Although the Northern provinces suffered from recurrent crop failures, food shortages, and risks of starvation, the plight of the people was remarkably severe by the end of 1971. To its discredit, the Government first ignored and then played down the catastrophe. Life in Addis Ababa seemed basically unaffected by the famine.

Early in 1972, Haile Selassie mediated a settlement between the Sudanese Government and the South Sudan Liberation Movement bringing an end to the 17 Years War. The Addis Ababa Agreement granted regional autonomy to Southern Sudan. Sudanese President Gaafar Nimeiry agreed to restrict Eritrean insurgents’ use of Sudanese supply lines in exchange for the IEG’s prohibiting Sudanese rebel bases in Ethiopia.

In Eritrea, things were going better for the Emperor. With the help of Israeli counterinsurgency experts, the IEG regained ground in Eritrea. As the fortunes of the ELF declined, another rebel group came into being in February 1972 when the Ethiopian Peoples Liberation Front (EPLF) was formed. The nascent EPLF was bolstered by weapons and funds from the USSR. Haile Selassie had failed to resolve the problems caused by the Eritrean and Ogaden separatist movements, but he managed to keep both under control. None of these movements threatened the Emperor’s grip over his government. Indeed, a majority of Ethiopians supported the defense of the country’s national unity.

More distressing, but hardly noticed by the IEG, was the deep dissatisfaction of urban populations over conditions of life, especially in Addis Ababa, and the slow pace of development. Haile Selassie and his retainers failed to see just how strong and widespread opposition to the old order had grown. Repressive actions and the closed nature of the imperial regime pushed the educated elite to identify with the lower classes and to see the complete destruction of the existing order as prerequisite to its empowerment. Ethiopia slowly was becoming an arsenal of explosive political charges waiting to be detonated by any sudden or precipitating negative occurrence.

When the country celebrated the Emperor’s eightieth birthday on July 23rd, 1972, many observers hoped that Haile Selassie might voluntarily abdicate his throne in favor of Crown Prince Assfa Wossen, who would be more favorably disposed toward a constitutional monarchy. A change du regime did not occur, however, and only a few months later, the Crown Prince suffered a debilitating stroke.

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35Henze, 133.
The ultimate question for the nation, still unanswered after decades of pertinence, was whether change would come to feudal Ethiopia at a fast enough pace to ease the pressure mounting for a drastic reordering of the entire system? The Emperor often said that, to be sustainable, change should be introduced gradually. From his perspective, economic development was slow, but not liable to bring about widespread discontent. True, segments of the population were growing restless with the status quo, but as Robert Kaplan observed, “pushing [Haile Selassie] for reform would have been like tinkering with the divine order.” Thus, there was no major challenge to the government of Haile Selassie in 1972. Had there been some unexpected trouble, the self-confident Emperor would, as he had done so often in the past, be quite capable of handling it. Haile Selassie rested assured that the majority of his countrymen and his mighty military would not let him down, even if a few young agitators might cause trouble.

The Emperor had endured “by a combination of skillful diplomacy abroad, ruthless political repression at home, and good luck in terms of a passive population” who venerated the throne. The monarch still exercised his power to send vocal opponents in the government to provincial exile through *shum-sher*. The accumulative disappointment of those whose human capital appeared to be underappreciated and unrewarded was mounting, however, and increasing numbers of the educated elite, at least among themselves, were complaining about these restraints. In the past, Haile Selassie had successfully ignored problems or suppressed them. Why should he abandon such a winning formula of governance?

Events of 1973, an *annushorribilis* of Haile Selassie, however, were to bring a dramatic decline in the fortunes of the Emperor. By early spring, the famine in the nation’s north was claiming the lives of hundreds of thousands of peasants of Tigray and Wollo. Thousands more had sought relief in Ethiopian towns and villages. This was duly reported by university students and faculty (notably on April 14 by Professors Abraham Demoz, Alula Abate, and Getachew Haile). Yet the IEG refused to act and engaged in a cover-up operation and a conspiracy of silence that would not be forgotten by the Ethiopian masses when the truth was revealed. Intellectuals and officials were embarrassed by the government’s prevarication that was indicative of the deterioration of imperial authority. The Wollo famine had created a crisis that divided and weakened the ruling elite. Many Ethiopians, who once waited hours in line just to catch a glimpse of their beloved Jan Hoy, were disillusioned too.

Discontent with government policies in the Oromo areas had spawned the organization of the Oromo Liberation Front while trouble continued to boil in the cauldrons of Somalia and Eritrea. Increasingly, various ethnic communities railed against what they perceived as Shoa-Anhara-Christian cultural and political domination of their traditional homelands. Soviet and Cuban military intrusion in neighboring states and growing insurgency posed real threats to Ethiopia’s security. In May 1973 Haile Selassie met Nixon on his final state visit to the United States (his sixth to Washington, establishing a record for the most state visits by a foreign head of state). Haile Selassie importuned Nixon with a $450 million shopping list of military hardware that included F-4 Phantoms, M-60 tanks, surface-to-air missiles, and air-to-ground missiles. His timing was abysmal because of U.S. plans to withdraw from Kagnew by the end of FY 1974. The Nixon Administration was more concerned with war in Vietnam and the Watergate scandal than

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the plight of the ancient Emperor and gave a basically unfavorable response to the IEG’s requests for arms. The United States did agree to continue to grant military aid and training at agreed upon levels and to supplement the program with credits for military sales, but this was far less than what had been requested. The rebuff by the United States made Haile Selassie’s last attempt at personal diplomacy at the White House “an unqualified disaster.”

The Emperor’s returning home from America with little to show for the effort and the shutdown of Kagnew were added to the litany of woes engulfing the monarchy. At the very time Haile Selassie’s attention appeared riveted on international affairs, his domestic scene, a cauldron of cooling melt, was deteriorating badly. Ethiopia’s frustrated intellectuals, students, teachers, technicians, civil servants, labor leaders, police, armed forces, farmers, and businessmen from a newly emerging sector were all alienated and objected to the government’s botched handling of the devastating famine in Wollo, a stagnant economy, and the lack of reform in Ethiopia. All these groups that Haile Selassie had fostered enjoyed new found autonomy and freedom of action and contended for power as his government fell into disarray. The nation’s ruler was besieged with allegations of graft, egregious grandiosity, and greed. Haile Selassie’s government obviated the obvious: the very groups that the Emperor as a man of vision had created or elevated in his policy of modernization stretching over several decades accused him of holding back the country’s progress and the Emperor seemed at a loss to respond. Faced with a country keening for reassurance and reinvention, Haile Selassie turned out to be a pragmatist Emperor who could not learn from his mistakes and adapt. The Emperor’s achievements had been many but were irrelevant to the growing throng of disgruntled citizens. The once invincible regime had become politically inept.

On May 24th, only a few days after his return from Washington, Haile Selassie began the 10th-anniversary celebration of the OAU by declaring that all of Africa would be liberated from foreign domination in the next 10 years. Later at Africa Hall, he spoke to 23 African heads of state or their deputies at the 10th anniversary meeting and advocated a system for the mutual defense of the 41-member nations and the creation of a permanent Africa peacekeeping force. The OAU meeting was marred, however, by vitriolic exchanges between the Ethiopian delegation and representatives of Libya and Somalia, who accused the IEG leadership of warmongering and of supporting Zionists and colonialists. The Emperor was disappointed by such rancor. After ten years, the OAU, the organization that Haile Selassie took such pride in, was strained, but not torn, by bitter disputes.

It would be foreign affairs of another sort that soon would light the fuse of Ethiopia’s cache of explosive domestic issues. In October, the Yom Kippur War in Israel had a direct and devastating effect on Ethiopia. The ensuing closure of the Suez Canal and OPEC’s quadrupling the price of oil triggered an international economic crisis. This produced a dramatic rise in the price of imported goods in Ethiopia and adversely affected exports. In order to alleviate the government’s financial crisis caused by the purchase of expensive oil, the IEG raised the local cost of petrol by 50%. This contributed to severe inflationary pressures that resulted in a sharp deterioration of the conditions of life in urban centers. The cost of food shot up and unemployment escalated. Crisis had become a chronic condition. Money may not be at the heart of all revolutions, but it is at most, and it played a major role in the discontent that pulsated throughout Addis Ababa in 1973.

It was during this time that radical students and teachers forged an alliance with the rank and file members of the Confederation of Ethiopian Labor Unions. Together they attacked the deteriorating political scene: alleged corruption at all levels of government, low salaries and poor working conditions of employees, the spiraling cost of living, the unequal distribution of...
educational opportunities, and the exploitation of landless peasants.\textsuperscript{44} The peasants, however, were not inspired to join in the uprising.\textsuperscript{45} The protests of 1973-1974 and the ensuing velvet revolution essentially were urban in nature and did not involve massive unrest among the peasants.

The inability to remove the causes of social discontent and the increasing reliance on the military demonstrated the fragility of the imperial regime. The government’s use of repressive methods polarized the populace and brought attention to radical elite groups rather than to those counseling moderation. The civilian left quickly assumed the leadership of the protest and rationalized it in terms of Marxist-Leninist theories.\textsuperscript{46} Their commitment to socialist egalitarianism was central to the ensuing loss of legitimacy of the monarchy and nobility as well as the rejection of moderate reformism.\textsuperscript{47} The tragedy was that there was not a large enough constituency of moderate reformers championing temperance and reason to counter the extremism of the outspoken radicals. The moderates were attacked on one side by the ancient regime for daring to criticize the government and on the other, by the aggressive leftists who viewed opposing radicalism as capitulation to the monarchy.

Also in October, 1973, British filmmaker Jonathan Dimbleby made a video program, “The Unknown Famine,” about the suffering in Wollo. The program was broadcast in the U.K. on October 18 and stimulated a massive influx of aid while at the same time putting Haile Selassie’s government in a bad light. The Soviets weighed in too with Kremlin propaganda depicting Haile Selassie's Ethiopia as backwards and inept.\textsuperscript{48} Radicals distributed pamphlets reflecting student unrest and accusing the regime “of imprisoning students in labor camps, torturing political prisoners, massacring peasants, breaking strikes, and arbitrarily raising taxes.”\textsuperscript{49}

Even Ethiopian popular culture was infiltrated by the radicals. The lyrics of one of the country’s most popular songs of 1973, “I Can't Take It Anymore,” were infused with wax and gold, containing a political slogan disguised as a love song.\textsuperscript{50} So fortified in a revolutionary environment they had helped forge, student protestors pressed on in their demands for changes by the IEG as the year came to an end.

**The Rise of the Derg**

Members of Haile Selassie’s military started a cascade of revolutionary events in early 1974 that would sweep the IEG into the depths of change from which it could not emerge intact. On January 12, rank-and-file soldiers of the Negele Boran garrison in the southern part of the country mutinied over bad food and the lack of drinking water. This was followed on February 10 by a mutiny of Air Force NGOs and technicians at Debre Zeit Air Force base near the Emperor’s weekend retreat, “Fairfield.” Spurred on by NCOs, the mutiny spread to other units whose servicemen were disgruntled over low pay and unsatisfactory barracks conditions. Also at this time, a group of lower-level officers organized an armed forces coordinating committee with representatives from major military units. The Emperor responded by raising salary levels by 33% and improving pensions and allowances, apparently muting the armed forces protests.

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\textsuperscript{44} Mark Paulos, *Haile Selassie*, 190-1.
\textsuperscript{47} Ibid.
\textsuperscript{48} Krishna Kumar, *Postconflict Elections, Democratization, and International Assistance* (Boulder, CO: Lynne Rienner, 1998), 114.

http://scholarworks.wmich.edu/ijad
Concurrent with the military unrest, university students, supported by professors and high school teachers in Addis Ababa, went on strike against proposed reforms contained in the Education Sector Review. A few days later, school teachers went on strike for better pay and were joined in protest by taxi drivers striking over the proposed 50% increase in gasoline prices. The numbers of demonstrators swelled with street vendors and urban poor and jobless attracted to the cause. In Addis Ababa, the police were unable to maintain control, and the insurrection spread to other towns. After four days of serious riots, four people had been killed and many others wounded. Property of high ranking government officials was badly damaged, and scores of vehicles were destroyed. In response, the government arrested a thousand people including 350 taxi drivers and charged them with sedition. The landed aristocracy put the blame for the ongoing unrest on Prime Minister Aklilu Habte Wold and his followers and pressured the Emperor to remove them. Haile Selassie called an extraordinary meeting of his cabinet and the crown council and decided to raise teachers’ salaries, suspend the Education Sector Review, reduce the price of gasoline and other essential services, and institute a freeze on the cost of basic commodities. On 23 February, the Emperor announced these decisions on state television. This calmed the public momentarily. The Marxists, however, were nonplussed, for they could not have anticipated the success of having their demands met so readily. This was the moment when the activists might have seized power, but they were unprepared. Protesting against the IEG was easier than having a plan to put into place when the government stumbled. The radicals had called for a socialist revolution, but they lacked the organizational structure and unity to bring it about. The radicals likewise lacked leadership capable of directing the country out of its chaos. This opened the way for the Armed Forces to take center stage in the political battle and quickly neutralize, co-opt, or circumvent all potential opposition. In doing so, the Derg became the de facto government while the legal government was exercising little power.

Meanwhile, mutinies in the military resumed. The promised military wage hike was not substantial enough to pacify the enlisted men and NCOs of the Army’s Second Division in Asmara who mutinied on February 25 and occupied most of the city. Pledges of support and solidarity flowed in from other units all over the country. On February 28, Haile Selassie again went on television to agree to the army’s demands for still greater pay—a most unusual action by the Emperor and indicative of the soldier’s increasing clout at the palace.

Up until this time, the military had made only demands benefiting the armed forces. But sensing a power vacuum, on 1 March, radical military officers circulated leaflets stating political demands affecting civilian society: land reforms, the creation of political parties and the holding of free elections, the release of political prisoners, guarantees of press freedom, and the trial of former ministers for corruption and dereliction of duty. The officers formed a representative committee to oversee the implementation of their demands. In the absence of opposition political parties and the weakening of the regime, the officers who initiated the demands decided to organize such an opposition and to legitimize it by seeking a mandate from the armed forces, who were asked to send to Addis Ababa three representatives per unit: a junior officer, a NCO, and an enlisted man. The officers believed such a scheme of organization would prevent a division within the armed forces that had undermined the 1960 attempted coup. It would be four months before this new representative military organization would be convened, however.

On 28 February, only eight hours after the Emperor had acceded, Prime Minister Aklilu and his cabinet submitted requests for resignation (following what was thought to be proper palace protocol). The Emperor quickly granted the requests. None of the rebellious groups had asked the P.M. to step down, and the resignations were seen as signs of panic and ineptitude. The

51 Messay, Ideology, 205.
53 Tekalign, 178.
Emperor named the Oxford-educated, progressive aristocrat Endalkachew Makonnen as Prime Minister. Although Endalkachew “called upon some of Ethiopia’s best educated, western-trained and reform-minded elites to form a cabinet that would generate wide-ranging reforms,” his choices, almost all of aristocratic background with ties to leading families of the traditional nobility mostly from Addis Ababa or Shewa, were not popular with the general public. Their connections to the Palace were irrevocable in the eyes of many. Endalkachew attempted to address demands of the protesters by presenting reforms, some of which would have changed the autocratic nature of the monarchy.

The Emperor also appointed General Abiye Abebe chief of staff and Minister of Defense and empowered him to use the armed forces to maintain law and order and to take strict measures against troublemakers. The armed forces pledged their allegiance to the Emperor’s government, a propitious loyalty that thwarted a plot against the government by Air Force officers in late March.

In response to continuing demonstrations and demands by students and teachers, on 5 March, Haile Selassie announced that the 1955 Constitution would be revised to make the Prime Minister responsible to parliament. Some people still hoped that the “transition to a more open political system would go smoothly and a liberalized government could be in place before Haile Selassie departed the scene.” Most wanted a more open society, a democratic political system, broadened educational opportunity, and faster economic progress. As if to squelch such possibilities, the Emperor announced his plan to revise the constitution the same day, the Confederation of Ethiopian Labor Unions called a general strike that paralyzed the nation for four days. Student agitation and workers’ militancy flourished unabated.

Indeed, the most widespread strikes in the history of the nation took place in April. Labor, students, teachers, civil servants, military veterans, municipal employees, railroad workers, bus drivers, medical personnel, garbage collectors, priests, and even Imperial Palace servants went on strike. Revolutionists were no longer just a few young intellectuals but a cross-section of Ethiopian society.

On April 20, one of the nation’s largest demonstrations took place when 100,000 Moslems and their supporters marched in Addis Ababa demanding religious equality and separation of church and state. Six days later, Haile Selassie I University was shut down.

At Easter, perhaps to shift public attention from the turmoil in the capital, Haile Selassie proclaimed his grandson, Zara Yakob, the eldest son of Crown Prince Asafa Wossen, next in succession after his father. By then, however, widespread skepticism about the viability of the monarchy was rampant throughout the country. The Emperor’s combined probity and vigor had gone missing. One can speculate about what might have happened, had Haile Selassie stepped down at that time and a well-thought-through transition to a constitutional monarchy put in place.

The Prime Minister tried to restore order and help bolster the legitimacy of the regime in the eyes of the general population. But instead of initiating liberalizing reforms, Endalkachew attempted to appease the protestors with vague promises of change. His actions were once more too little, too late. At a time when the Emperor’s once unassailable personal popularity had dipped and the country was demanding change, the new cabinet failed to move decisively toward a genuine reform of the government.

In the midst of the crises, with tensions running high, Haile Selassie, in his marmoreal grandeur, maintained grace under pressure. When Endalkachew held an urgent meeting with the Emperor, he was struck by “the old man’s quiet dignity and calm.” The P.M. later reported to his Cabinet, “That man is made of steel.”

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55 Henze, 260.

56 Paulos, *Haile Selassie*, 211.

57 Tekalign, 162.

http://scholarworks.wmich.edu/ijad
Unable to appease the social unrest, the new Prime Minister, on 23 April, called on the military to help establish law and order. On 27 April, the Armed Forces Coordinating Committee (AFCC) under the command of the moderate Colonel Alem Zewde Tessema issued its first statement, announcing that 19 ministers and former officials of the IEG had been arrested. On 30 April, Endalkachew announced the creation of a joint military-civilian National Security Commission under General Abiye Abebe to deal with growing lawlessness and the numerous wildcat strikes crippling the country. Many on the Commission worried that the failure to quell the serious disruption in the social fabric might lead to anarchy that could only encourage secessionist groups. The National Security Commission replaced the Armed Forces Coordinating Committee that radicals in the military accused of having too close ties to the aristocracy. The creation of the Commission, however, called attention to the civilian government’s inability to institute law and order and “prematurely provoked the Armed Forces to play a more active role in harnessing the political upheaval to their favor.”

It also inspired radicals in the military to create a competing organization to counter the one supporting the Prime Minister. Ambitious members of the armed services realized that the military was the only organization capable of running the country. But which group within the military would wield power?

On 26 June, members of the Chamber of Deputies petitioned the Emperor to release some of the ministers and officials that had been imprisoned by the AFCC for corruption, pending an investigation. To the radicals, this action signaled that the ruling elite “had no intention of bringing those arrested to justice.” This set the stage for the formal establishment of the new representative military organization.

The Coordinating Committee of the Armed Forces, Police, and Territorial Army officially came into being on 28 June 1974. This secretive organization came to be known as “the Derg,” the Ge’ez word for “committee” or “council.” At its first session, there were 109 members actually in attendance, a majority of them NCOs and enlisted men, and only 49 officers. By that time, it was obvious that Endalkachew was unable to establish law and order, and the vacuum in governance provided an irresistible invitation for the military to usurp power. Sadly, the government’s inability to effectively deal with the crises of 1974 and the atmosphere of radicalism created by the educated elite drew the teeth of the extremists and facilitated the formation of the new Coordinating Committee.

The nation’s traditional leadership from the ranks of the aristocracy and young technocrats that Haile Selassie had raised to positions of responsibility and influence and who advocated gradual change offered little challenge to the Derg. Likewise, the civilian left calling for immediate and radical revolution lacked a proven leadership capable of directing the country out of its chaos. Thus, the Armed Forces were drawn into the center of the political battle and cleverly neutralized, co-opted, or circumvented all potential opposition. In doing so, the Derg became the de facto government while the legal cabinet was exercising little power.

A little-known army major, Mengistu Haile Mariam, emerged as elected leader of the Coordinating Committee. Mengistu had impressed the group with his plans for action and astute oratorical skills. The Derg set about vetting the grievances of various military units and investigating abuses by senior officers and staff to root out corruption in the military. Soldiers occupied strategic places in the city, and the Derg used the public broadcasting system to routinely issue orders and to bombard listeners with martial music. “Ethiopia Tikdem” (Ethiopia first) became their rallying cry and nationalist manifesto.

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60 Tekalign, 202.
61 Messay, *Ideology*, 188.
62 Tekalign, 202-3.
The new Derg moved swiftly and on 30 June, demanded that the Emperor appoint a new Prime Minister and a new defense minister and arrested 50 more officials who were either accused of corruption or of opposing implementation of reforms. The Derg then was empowered by the Emperor to arrest military officers and government officials at every level. Many prominent figures in the IEG came voluntarily into detention in June and July. The Derg assured them that their alleged misdemeanors and financial irregularities would be systematically investigated and fairly judged. In the following two weeks, 150 more members of the former government and current government, provincial administrators, and the nobility were incarcerated. On 9 July, the Derg announced a new revised constitution was being drafted, a belated stab at trying to take credit for an effort already well under way.

The Emperor complied with the Derg’s demands and dismissed Endalkachew on 22 July 1974 and replaced him on 3 August with Michael Imru, a cousin of Haile Selassie and another aristocrat with a liberal reputation. Shortly thereafter, Endalkachew was arrested and joined his predecessor Aklilu Habte-Wold, most of their cabinets, regional governors, many senior military officers, and officials of the Imperial court in custody.

For his Cabinet, the new Prime Minister chose ministers who for the most part were members of the previous government. Among them was General Aman Andom, a popular military hero and a Sandhurst graduate noted for his successes against Somali invaders, who was Chief of the General Staff and Minister of Defense. The Imru Cabinet tried desperately to exercise power but found itself hamstrung by the Derg’s controls.

On August 10, the proposed revision of the 1955 constitution finally was published and presented to Haile Selassie. It called for the replacement of the absolute monarchy by a parliamentary regime with the Emperor as a figurehead and for the division of powers and the disestablishment of the Ethiopian Orthodox Church. Civil rights and liberties were to be protected, universal suffrage instigated, and the Prime Minister made responsible to Parliament. To take public attention away from such possibilities, the Derg promoted open discussion of the future of the monarchy. Vitriolic anti-feudal and anti-monarchical views were aired by the agitated public. Haile Selassie was personally vilified and government-controlled newspapers published scathing attacks on the monarchy and the fallen governments as replete with corruption and incompetence. The Emperor was maligned for the huge landholdings of the imperial family, second only to those of the church, and for what was described as his unlawfully enriching himself through business enterprises such as part ownership of the country’s largest bus service and the St. George Brewery. The outrageous accusation was made that Haile Selassie had stashed over 2 billion pounds sterling in gold bars in a Swiss bank, a charge never substantiated.63 The Emperor even was accused of treason for leaving the country during the Fascist occupation. The press also exposed attempts by corrupt local officials to cover up the extent of the Wollo famine from the IEG, illustrating how the system of government kept officials shockingly out of touch with the lives of ordinary people.

While the radical civilians ranted, the Derg acted by dismantling the imperial government and numerous public institutions. On August 16, the crown council was abolished, as was the Emperor’s own appeals court, the Chilot, and the office of the chief of staff in the Emperor’s cabinet. The Commander of the Imperial Bodyguard and the Emperor’s senior aid-de-camp were arrested. The office of the Emperor’s exchequer was removed on August 24. The Emperor’s main residence, Jubilee Palace, was nationalized and renamed the “National Palace.” On August 26, the National Resources Commission, which took care of the Emperor’s private holdings and the disbursement of money, gifts, and favors, was abolished and its functions taken over by the Ministry of Finance. The CIA-trained and -equipped Office of the Imperial Security Apparatus

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63Taffara, 360-72; Tekalign,238-9.
likewise was eliminated. The loss of allegiance among the military was tearing asunder Haile Selassie’s government.⁶⁴

On August 27, a special commission of inquiry held hearings on the Wollo famine. Haile Selassie was directly linked to the cover-up of the disaster by the testimony of a former governor of the province who attested that he had warned high ranking officials, including the Emperor, in August 1970 that the famine might affect large numbers of people in Wollo. The prime minister, the crown prince, and the Emperor, however, ignored the warning and refused to take action to meet the emergency. A week later, students paraded in Addis Ababa shouting, “Haile Selassie is a thief!” and “Hang Haile Selassie!”⁶⁵ Leaflets were posted on the streets showing photographs of the Emperor feeding his dogs from a silver tray, alongside pictures of famine victims. Although the Derg had forbidden slanderous personal attacks on the Emperor, the students went unpunished and there was no public outcry about their actions.

As the Ethiopian New Year approached, on September 11, soldiers in tanks, armored personnel carriers, and jeeps with mounted machine guns took up strategic positions throughout the capital. The Derg arrested the Emperor’s only surviving daughter and close personal adviser, Princess Tenagne-Worq, as well as other members of the Royal Family. Late in the day, Abune Tewoflos, patriarch of the Ethiopian Orthodox Church, gave his annual New Year’s Address on national television and radio. In his speech, “the Patriarch likened Ethiopia to a ship in stormy seas, charting a new path into the future.” To the shock of Haile Selassie’s supporters, Tewoflos concluded without giving his traditional blessing of the Emperor and the royal family and seemed to endorse the revolution by wishing success to the mission of the ruling Derg.⁶⁶ The fate of Haile Selassie was sealed.

That evening, Ethiopian National Television aired a disturbing documentary on the Wollo famine. Scenes of starving children, women, and men taken in April 1973 were interspersed with footage of the royal family and the aristocracy feasting in the palace and other elegant settings.⁶⁷ Many Ethiopians in the capital were shocked by the distressing scenes of suffering. The film provided a strong indictment of the Emperor for his nonfeasance in ameliorating the tragedy. Students and radicals were already demanding a public trial of Haile Selassie for his alleged crimes, but the Derg had backed away from such action in light of the Emperor’s continuing prestige in the international community.⁶⁸ The television program provided a trial in the court of public opinion for the Emperor, who had been so spectacularly unable to fill the leadership void in Addis Ababa, far more effective than any the judicial process might have produced.

**Haile Selassie Deposed**

Early in the morning of New Year’s Day, September 12, a heavily armed thirteen-man delegation from the Derg went to what had been Jubilee Palace and read a short statement to the Emperor telling him that he had been deposed. According to an eyewitness, Haile Selassie responded, “We have carefully listened to what you have said. If you have been motivated by the nation’s interests, it is impossible to place personal interests above those of the nation. We have so far served our country and people to the best of our abilities. If you are saying that your turn has now come, you should make sure that you look after Ethiopia.”⁶⁹

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⁶⁷Taffara, 351.

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Another version cites the Emperor’s giving a more typically sangfroid reply: “We have heard what you have said. Being ‘Emperor of Ethiopia’ is more than a name. [We have worked] for the nation and the people in peace time, and in preparing the country to defend itself against its enemies [in times of war]: we have no doubt that these are known by our armed forces. Yet, when changes take place that are in the interests of the nation, they should prevail. We have heard what you have just read. You should now stop.”

The Emperor submitted while maintaining his customary stoicism and air of authority, but before being led out of the palace under guard, he said: “You are all children; and as such, you have engaged in a childish act. You do not know your country. The danger is you will lead her down the road to destruction.” Accompanied by a single servant, Haile Selassie was unceremoniously driven in a Volkswagen beetle, a far cry from his accustomed Concours d’Elegances of the imperial garage, to his initial place of imprisonment in the barracks of the 4th Division. At the same time, most of his family was incarcerated at the late Duke of Harrar’s residence in the north of the capital.

That morning, an announcer on National Radio broadcast Proclamation No. 1 of Meskerem 2, 1967 (September 12, 1974), issued by the Derg:

Considering that, although the people of Ethiopia look in good faith upon the Crown, which has persisted for a long period in Ethiopian history as a symbol of unity, Haile Selassie I, who has ruled this country for more than 50 years ever since he assumed power as Crown Prince, has not only left the country in its present crisis by abusing at various times the high and dignified authority conferred on him by the Ethiopian people but also, being over 82 years of age and due to the consequent physical and mental exhaustion, is no more able to shoulder the high responsibilities of leadership.

Emperor Haile-Selassie was deposed, read the announcer, and would be succeeded by Crown Prince AsfaWossen, who was to be a titular monarch, the “King of Ethiopia,” the Conquering Lion of Ethiopia, with no political power. The Prince, who was undergoing medical treatment overseas, would be crowned upon his return. But there could be little doubt that the revolution had ended the feudal system of Ethiopia, a whole mythology of social cohesion around anointed authority and mystery, headed by its long-lived monarch. Haile Selassie’s government was no more.

The 1955 Constitution was abrogated and would be replaced by the new draft constitution requested by the Derg. Parliament was suspended, and the armed forces, the police, and Territorial Army assumed full government power until elections were held under the new constitution. Strikes, unauthorized peaceful demonstrations, opposition to the motto of “Ethiopia Tikdem” and any act aimed at disrupting the country’s peace and security were prohibited. On that same morning, the Derg chose General Aman Andom, a strong advocate of Ethiopian nationalism, to be its chairman and acting head-of-state until the Crown Prince could return. General Aman was a logical choice for head of state. In addition to his military bona fides, he had strong support from Eritreans.

Also on September 12, the Cabinet was called to a morning meeting. The objectives of the Derg were explained and the working relationship between the Cabinet and the Derg made clear. The Council of Ministers would carry out its functions working under the Derg. There was no doubt about which group was then in charge. Thus the short-lived power of Michael Imru’s Cabinet came to an end after tenure of only 44 days. The Cabinet’s legitimacy stemmed from that

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70 Ibid.
71 Paulos, *Haile Selassie*, 236.
72 Tekalign, 229-30.
73 Taffara, 353.
74 Tekalign, 228.
75 Ibid.
of the Emperor, and when Haile Selassie was deposed, it ceased to exist except as a pro forma sounding board of the Derg.\textsuperscript{76}

The United States accepted Haile Selassie's deposition without disruption of relations with Ethiopia. The Derg focused on internal issues and declared it would follow a non-aligned foreign policy. U.S. officials viewing the transformation of government with regret but not rancor looked to moderate military officers, many of whom had trained in the United States, to counter the Marxist-Leninist ideology espoused by extremists of the revolution. They grossly underestimated the ruthlessness of the radicals of the Derg.

On September 15, the Derg renamed itself the Provisional Military Administrative Council (PMAC) and took control of the government. Some Ethiopians still were optimistic that under the direction of General Aman, a bloodless transformation of the government might take place. Soon, however, Chairman Aman clashed with radical elements in the Derg about a new military offensive in Eritrea and a proposal to execute high officials of the Emperor's former government. The Derg neutralized units loyal to Aman--the Imperial Bodyguard, the Air Force, and the Engineers--and removed the charismatic general from power. Mengistu had Aman executed in a shootout at his home but made his murder appear to be part of a larger security operation, the massacre of 60 senior officials of the previous Imperial government on November 24, 1974. The Derg, acting as a kangaroo court, charged the imprisoned civil and military officials with abuse of power while in office that had resulted in loss of lives during the Wollo famine. Then, the Derg, red in tooth and claw, summarily found all the officials guilty of crimes against the nation and sentenced them to death. The detainees were chained in pairs and brutally killed by machine gun fire at the Addis Ababa central prison. Their bodies were bulldozed into a common grave. The executed, later known as "the Sixty," included two former Prime Ministers, Aklilu Habte Wold and Endalkachew Makonnen. On the following morning, Radio Ethiopia announced the massacre, later to be called “Bloody Saturday,” to a stunned audience in Addis Ababa.\textsuperscript{77} Fear thereafter garroted hope. In a single day, the revolution had turned bloody. The Times of London called the murders “a lapse into savagery.” The subsequent savagery of the Derg during the following seventeen years marked one of the most tragic eras in Ethiopian history.

Mengistu served as interim president for five days until the Derg appointed Brigadier General Tafari Bente of the Fourth Division as the new Chairman and head of state. Tafari presented himself as the public face of the ruling junta, with Mengistu and Atanfu Abate as his two vice-Chairmen with the new ranks of Lieutenant-Colonels.\textsuperscript{78} On December 20, the Derg proclaimed the establishment of "Ethiopian socialism," based on the declaration of Ethiopia Tikdem. The Derg had quickly adopted Marxist-Leninist ideology because it justified the absolute power that it needed to eliminate all other contending groups.\textsuperscript{79} Nevertheless, Ethiopia technically remained a monarchy until March 1975 when the Derg declared the Crown Prince’s “failure” to return from London and assume his throne had brought the Solomonic Dynasty to an end.\textsuperscript{80} The monarchy was formally abolished in May 1975, and Marxism-Leninism was proclaimed the ideology of the state. By late 1977, Mengistu had orchestrated the deaths of Tafari and Atanfu and ruled as a ruthless dictator until he was overthrown in 1991.

Conclusion

The Ethiopian Revolution followed several failed opportunities that the IEG might have pursued to move toward more democratic governance. In early 1969, Ethiopia enjoyed a relative

\textsuperscript{76} Tekalign, 227.
\textsuperscript{77} Tekalign, 243; Taffara, 420-3; ZaudeHailemariam, \textit{Ethiopian Introspection} (Privately Published, 2008), 379-81.
\textsuperscript{78} Marina and David Ottaway, \textit{Ethiopia: Empire in Revolution} (New York: Africana, 1978), 134.
\textsuperscript{79} Messay, \textit{Ideology}, 335.
\textsuperscript{80} David H. Shinn and Thomas P. Ofcansky, \textit{Historical Dictionary of Ethiopia} (Lanham, MD: Scarecrow Press, 2004), 44.
calm, being at peace with its neighbors and with the internal insurgencies in outlying provinces under control. The army was large and well-equipped, the U.S. Government appeared content to continue to provide military assistance as rental for Kagnew Station, and the newly elected American President, Richard Nixon, was a longtime friend of Haile Selassie. The Emperor was in his late 70s and slowing down. It would have been a good time for him to retire or at least to announce a line of succession with a firm timeline for its realization. He could have gone out on a positive note and planned for a constitutional monarchy to come into being. The moment passed, however, and by the end of 1969, the calm was shattered by changes in external and internal actors. Taking care of the new challenges gave Jan Hoy a rationale for staying in power.

In October 1970, the Emperor played a significant role in the Third Non-Aligned Conference, the 25th anniversary of the founding of the UN, and the tradition-shattering gathering of world leaders at Nixon’s White House. International accolades showered down on Haile Selassie upon his triumphal return home. Ever the consummate practitioner of astute public relations, the Emperor might have announced his plans for a new era in Ethiopia and departed gracefully. Jan Hoy could have introduced constitutional monarchy from the top down and that might well have led to gradual democratization and even land reform. Instead he remained on the throne while domestic problems festered.

The last chance for Haile Selassie to step down while still enjoying support from most of his subjects was during his eightieth birthday celebration in 1972. There was no change of regime on that occasion, and shortly thereafter, a "revolutionary environment" had developed to the point that events throughout the country were reeling beyond the control of the monarchy. The Emperor’s opportunities for peaceful change had passed him by, and revolution was about to take a horrendous toll on the Solomonic Dynasty and the land of its reign.

Much of the life-cycle of a revolution described in Crane Brinton’s classic The Anatomy of Revolution is a useful tool in analyzing Ethiopia’s velvet revolution. According to Brinton, in most revolutions, the Old Order passes to a moderate regime that falls to a radical regime that finally is replaced by Thermidor, a period of relaxation from revolutionary policies characterized by the establishment of a tyrant, an unconstitutional ruler brought to power by revolution.81 If the early Derg can be titled a “moderate regime,” it was followed by a radical reign of "Terror and Virtue." Terror was exemplified by the many summary executions, civil war, and a struggle for power within the Derg. Virtue took the form of correcting the vices of the monarchical regime and its society with the establishment of "Ethiopian socialism," based on the declaration of Ethiopia Tikdem.82 On taking power, the radicals ruled through dictatorship and "rough-and-ready centralization." Brinton notes that "the characteristic form of this supreme authority is that of a committee."83

The Thermidor of the Ethiopian Revolution did not produce what Brinton called "convalescence" from the "fever" of radicalism. Indeed, throughout the reign of the Derg, radicalism flourished in a ghoulish way with e.g., its Red Terror, devastating civil war, failed mega-famine relief, and villagization. But the Ethiopian Thermidor did establish a tyrant, Mengistu, who shot and murdered his way to the top of government.

Brinton could have been depicting events in Ethiopia in his summary of the revolutionary process as moving from "financial breakdown, [to] organization of the discontented to remedy this breakdown ... revolutionary demands on the part of these organized discontented, demands which if granted would mean the virtual abdication of those governing, attempted use of force by the government, its failure, and the attainment of power by the revolutionists. These revolutionists have hitherto been acting as an organized and nearly unanimous group, but with the attainment of power it is clear that they are not united."84

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82 For Brinton’s description of "Terror and Virtue," see The Anatomy of Revolution, 180.
83 Brinton, 171.
84 Brinton, 253.
In 1973, dissidents led by university students challenged the Emperor’s monarchical power structure which had ruled for decades. Haile Selassie and the aristocracy resisted the sharing of power and the loss of their special privileges. They failed to share power with moderate dissidents and then lost control completely. Moderate leadership, which never really came to the fore, was repudiated, and the IEG was confronted with a series of crises which it could not resolve, emergencies that divided and weakened the ruling elite. The crises resulted in a loss of control by the government and a temporary political paralysis marked by a breakdown in accustomed order and stability.

Within the ranks of the revolutionists, leadership was notably missing. With little meaningful experience in representative institutions which might have provided the mechanisms for the establishment of a new order capable of minimizing conflicts and realizing the achievement of liberal goals, most of the revolutionists lacked leadership skills or experience. The monarchical system did not encourage such learning and development. The student dissidents were better Marxist ideologues than compromisers and “doers.” Experienced moderate leaders who might have been able to accomplish things were marginalized by accusations of their having lingering stigmata of the old regime. This left the military as the one organization among the dissidents with a history of being able to act decisively when necessary—and even the military initially led only reluctantly. Eventually the ruthless in the uniformed services provided activist leadership and fought it out amongst themselves to see who would become the top dog in the new power arrangement.

The actual overthrow of the Emperor was accompanied with a minimum of violence, although the bloody consolidation of power by the Derg, especially in the slaughter of "the Sixty," aborted any "honeymoon" period following the fall of the old regime.
Abstract
Ethiopian Air Lines (EAL) has committed to the purchase of 41 new aircraft, nearly doubling their fleet and introducing three new, state-of-the-art types (the A350-900 and the 787-8, and the DA40NG) into a fleet currently consisting of seven models. In a logistically complex industry, this represents a substantial increase in resource commitments and management responsibility in many areas including maintenance, pilot training, facilities, and route planning. The purpose of this paper is to examine this growth strategy, its underlying assumptions, and its sustainability given long-range industry trends in both the developed and the developing world. We will also examine some of the sociotechnical issues identified by aircraft manufacturers and political issues from the perspective of national governments in rapid growth of airlines in developing nations. These issues include human resource requirements and management models appropriate to a technological periphery. We anticipate that these comparisons will yield useful insights to other airlines in developing nations that are planning their expansion into wider markets.

Overview
History of Ethiopian Airlines (Ethiopian). Emperor Haile Selassie established the airline following the Italian Occupancy, 1935-40. Americans, British and French were enlisted to assist. Ethiopian was formed on December 21, 1945 and began operations on April 8, 1946. Ethiopian made its maiden international flight to Cairo in 1946 flying a Douglas C-47 Skytrain (Ethiopia: Academy Graduates, 2012). TWA assisted in the development by providing American pilots, maintenance technicians, administrators and managers. Within 25 years, in 1971, Ethiopian was prepared to operate independently, with Ethiopian personnel. Since its inception, Ethiopian Airlines has grown steadily (Ethiopian Airlines, n.d.). Currently, Ethiopian has nearly 6000 employees. They currently have 66 international and 17 domestic destinations. Within African, there are 41 destinations, eight in Europe and America, 17 in the Middle East and Asia. In addition they also have 24 destinations for cargo, 15 in Africa, seven in Gulf, Middle East and Asia and two in Europe (http://www.ethiopianairlines.com/en/corporate/default.aspx).

Operating Fleet
<table>
<thead>
<tr>
<th>Operating Fleet</th>
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</thead>
<tbody>
<tr>
<td>Long Range Passenger Services</td>
<td>5 - Boeing 777-200LR</td>
</tr>
<tr>
<td></td>
<td>11 - Boeing 767-300ER</td>
</tr>
<tr>
<td>Medium Range Passenger Services</td>
<td>7 - Boeing 757-200 ER</td>
</tr>
<tr>
<td></td>
<td>5 - Boeing 737-700</td>
</tr>
<tr>
<td></td>
<td>6 - Boeing 737-800 [2 with Sky Interior]</td>
</tr>
<tr>
<td>Regional and Domestic Passenger Services</td>
<td>8 - Q400 DHC-8</td>
</tr>
<tr>
<td>Cargo and Non-Scheduled Services</td>
<td>2 - Boeing 757-260F</td>
</tr>
<tr>
<td></td>
<td>2 - MD-11F</td>
</tr>
<tr>
<td></td>
<td>2 - Boeing 747-200F</td>
</tr>
<tr>
<td>Total operating fleet</td>
<td>48 Aircraft</td>
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</tbody>
</table>

Table 1. Fleet information: Their fleet consists of 48 commercial transport aircraft. This chart depicts their current fleet. (http://www.ethiopianairlines.com/en/corporate/fleet.aspx)

Aviation Activity in Africa
How does Ethiopian Airlines’ activity level compare to the current aviation activity in all of Africa? The International Monetary Fund (IMF), in its July 2010 Economic update says...
growth in Sub-Saharan Africa is expected to increase by 4.5% in 2010 and 4.9% in 2011, following growth of 2.9% in 2009. In response to the renewed economic activity in Africa and growing demand for air services, African airlines are repositioning themselves through cost-cutting, restructuring and re-engineering and this is set to yield profitability in 2010 of about US$100 million according to IATA.

Boeing forecast that the overall African economy is projected to grow at 4.8% in 2010 following 2.9% growth in 2009. The strong growth will be the outcome of the worldwide recovery, set to stimulate demand for African exports as well as attract imports into the continent. The strongest growth region will be West Africa, buoyed by foreign interest in new oil and minerals discoveries and mining activities.

**Substantial Fleet Increase in the next 20 Years**

In September 2010, Boeing forecast African carriers will experience steady growth over the next 20 years as air travel in Africa continues to grow with the economy. Boeing’s forecast African market new aircraft requirement to be 710 airplanes, approximately 2.3% of the estimated global forecast; worth about US$80 billion over the next 20 years.

**African market forecast Aircraft Requirement: 2010 to 2029**

Kuuchi (2010) reported that Airbus’ outlook for Africa is more bullish than Boeing’s, with Airbus expecting 1,270 aircraft deliveries in the 2009 to 2028 period, comprised of 341 aircraft of under 100 seats and 929 aircraft with more than 100 seats. This represents a more than doubling of the African passenger aircraft fleet. According to Airbus, the fleet growth would be boosted by intra-regional operations. The manufacturer forecast that domestic and intra-regional traffic will increase by 5.6% in the 2009 to 2018 period and by 6.2% in the 2019 to 2028 period.

Both Airbus and Boeing see opportunities arising from the need for replacing older aircraft in the region, particularly in the single-aisle market segment. The current African fleet is nearly 20 years old on average and the market craves more fuel efficient aircraft to being down the cost of operations, improve safety and minimize service disruptions (Kuuchi, 2010).

The drivers for new aircraft deliveries therefore will include; the growing demand for airline services, the need to replace aging, less fuel efficient and heavy maintenance dependent equipment as well as competition pressure by more aggressive non-African operators. Boeing views strong growth in Africa and this trend is expected to continue, with anticipated growth of intra-Africa at 5.7% over the 2009 to 2029 period. The growth to Asia Pacific is expected to be 8.7%, to North America 7.3%, to Europe 4.6%, to Middle East 6.5% and to Latin America 5.5%.

Airbus forecasted that total Africa traffic is expected to grow by 5.8% in the 2009 to 2018 period and by 5.4% in the 2019 to 2028 period. This represents a 20-year average growth of 5.6%, above the world average of 4.7%. Growth in freight traffic is anticipated at 4.9% and 4.5% respectively.

Ethiopian ordered 35 new airplanes direct from the manufacturers. Including the orders of five B777-200LR and twelve A350-900, Ethiopian has also on order ten Boeing B787 and eight Bombardier aircrafts. These investments enable Ethiopian to operate one of the youngest fleet in Africa with better comfort and efficiency. Ethiopian Airlines and ASKY signed a management contract which enables Ethiopian Airlines to manage ASKY for a period of five years. The management contract is an important move marking an historic intra-African co-operation in the airline business. The agreement helps the two carriers to develop a West African hub in Lome, Togo for the regional and inter-continental routes (Corporate History, 2012).

**Ethiopian Airlines, the Premier Airline in Africa**

Ethiopian received four different awards during in 2011. Ethiopian received "AFRICAN CARGO AIRLINE OF THE YEAR" Award on 24 February 2011. Ethiopian won “Deal of the Year 2010” Award on 20 April, 2011. Ethiopian Airlines also named "Africa’s Most Profitable Airlines" for the third time in a row in July 2011. Ethiopian Airlines also received the AFRAA
Award for being consistently profitable over the years at the 43rd AFRAA Annual General Assembly held in Marrakesh, Morocco on November 21, 2011 (http://www.ethiopianairlines.com/en/corporate/history.aspx).

Also noteworthy is that on December 11, 2011, Ethiopian Airlines Captain flew the first 787 to the African soil with debut landing at Addis Ababa’s Bole International Airport. Ethiopian Airlines joined Star Alliance on December 13, 2011. At a ceremony held at Addis Ababa’s Bole International Airport the Star Alliance Chief Executive Board (CEB) welcomed Ethiopian Airlines as the Alliance’s third carrier based on the African continent. Ethiopian’s expansion is supported by their mission statements as follows.

- To become the leading Aviation group in Africa by providing safe and reliable passenger and cargo air transport, Aviation Training, Flight Catering, MRO and Ground Services whose quality and price “value proposition” is always better than its competitors,
- To ensure being an airline of choice to its customers, employer of choice to its employees and an investment of choice to its Owner,
- To contribute positively to socio economic development of Ethiopia in particular and the countries, to which it operates in general by undertaking its corporate social responsibilities and providing vital global air connectivity,

**Vision 2025**

- To become the most competitive and leading aviation group in Africa by providing safe, market driven and customer focused passenger and cargo transport, aviation training, flight catering, MRO and ground services by 2025.

In 2010, Ethiopian produced an aggressive expansion plan in response to their high level of demand. Last year they experienced a 450% increase in passenger demand resulting in a 40% profit margin (Terefe Interview, 2011).

By 2025, Ethiopian expects to triple their fleet size from 45 to 112 aircraft. Their passenger traffic is expected to reach 18 million per year. Cargo is expected to increase by a factor of 7, to 710,000 million kilos. Revenue will increase by a factor of 10. Profit increases by a factor of 9. Staff will increase from 5,600 to 16,900.

Below is a list of the aircraft on order (http://www.ethiopianairlines.com/en/corporate/fleet.aspx). This is the largest order from any one airline within Africa and the most ambitious expansion plan in airline history.

<table>
<thead>
<tr>
<th>Fleet on Order</th>
<th></th>
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<tbody>
<tr>
<td>Long Range Passenger/Cargo Services</td>
<td>12 - A350-900 from Airbus</td>
</tr>
<tr>
<td></td>
<td>6 - 777-200F for Cargo</td>
</tr>
<tr>
<td></td>
<td>2 - 777-300F for Cargo</td>
</tr>
<tr>
<td></td>
<td>10 - 787-8 Dream Liner from Boeing</td>
</tr>
<tr>
<td>Long Range Cargo Services</td>
<td>4 - 777 Freighters from Boeing</td>
</tr>
<tr>
<td>Medium Range Passenger Services</td>
<td>8 - 737-800 from Boeing</td>
</tr>
<tr>
<td>Regional and Domestic Passenger Services</td>
<td>5 - Q400 (training aircraft)</td>
</tr>
<tr>
<td>Total fleet on order</td>
<td>43 Aircrafts</td>
</tr>
</tbody>
</table>

**Table 2. Ramifications of Rapid Growth on an Airline.**

**Human Resources**

*(How will they recruit eligible candidates for employment?)*. According to Ms. Terefe, Director, Public Relations at Ethiopian (Terefe Interview, 2011), the goal is to recruit mostly from the local population. In fact, their training programs are designed for Ethiopian Citizens only. The qualifications for candidates in all programs include age, height and weight.

http://scholarworks.wmich.edu/ijad
The most common age range for applicants is 18 to 25 years (http://www.ethiopianairlines.com/en/careers/training.aspx).

In contrast to aviation training practices in the United States, where students self-fund their own aviation training and education through various programs and schools, Ethiopian conducts ab-initio training for all of their new hires, including pilots, maintenance technicians, and cabin crew. They even provide leadership training for the administrators. Most new employees are trained by the airline within their Ethiopian Aviation Academy. This is a huge financial commitment on the part of Ethiopian. Therefore, they only hire and train the number of personnel that they need to fulfill operational duties.

In addition, they recruit world-wide for various positions, including flight crew (http://www.ethiopianairlines.com/en/careers/default.aspx). Approximately 4,000 people go through training each year. They are continuously updated their training technology (Tour of Ethiopian, February 2012). Ethiopian also conducts recurrent training in various areas including technical, cabin crew and commercial operation.

In the 2010/2011 reporting period, they increased this type of training by 27%. Therefore, in order to sustain the retraining activity, they will have to increase their staff and facilities accordingly. According to Captain Steve Jones, interviewed in April, 2011, a former Chief Pilot and operation manager at United Airlines, there are typically 6.5 pilots needed for each airplane. For Ethiopian, that equates to 280 new pilot hires just for the newly ordered aircraft. For support staff, the ratio of staff increases at the same proportion as the increase in fleet size...for example, by doubling their fleet, they will need to double their staff. This is in agreement with Ethiopians’ Vision 2025, where they stated an increase in staff from 5,600 to 16,900. In order to support their expanding route structure, they will also need to increase their sales force around the world. Each new destination required airline staff as well (Jones Interview, 2011). For Ethiopian, that means that they will need to staff numerous new locations. In 2010, Ethiopian opened new services to Pointe Noire, the second largest city in the Republic of Congo, effective June 16, 2010. In 2011, Ethiopian started new services to Hangzhou-China, to Malakal-Southern Sudan, Milan-Italy, and Muscat-Oman. Ethiopian also launched daily nonstop flights to Beijing with its long range 777-200.

Regardless of whether Ethiopian transfers their own employees from Addis or hire locally in at each new destination location, they must be anticipated the challenges of blending different cultures, language, authority, and work habits.

**What is required to accommodate increased training needs?** Ethiopian purchased five (5) new training aircraft, the Bombardier Q400, a turbo-prop aircraft. In addition, they have full scale simulation capability at the aviation academy (Tour of Ethiopian, Feb 2012). More instructors will join the training organization.

According to Ethiopians’ 2010/2011 Annual Report (p. 10), in order to satisfy the human capital requirement of the company along with Vision 2025, formulating cooperative programs with learning institutions was one of the major tasks for the year.

The effort is complemented by the support secured from the MoE (Ministry of Education) and MoD (Ministry of Defense). Currently, they have four groups of AMT (Aircraft Maintenance Technicians) trainees, enrolled in the Air Force training facility. The project with MoE has been successful and the curricula development for Technician, Cabin Crew and Customer service fields are completed and the documents are ready to be forwarded to MoE for accreditation with a plan to start the program in September 2011.

As one part of vision 2025 strategic direction, main partnership areas were clearly identified and memorandum of understanding (MoU) has been signed to institutionalize the relationships and assure continuity. To facilitate the recruitment process on cabin crew, customer service agents and others, ten regional and 14 preparatory high schools in Addis Ababa were approached to provide data exchange of students.
How will they retain employees once they are hired? African airlines face new challenges because of liberalization, alliances, free market pricing and new technology. The brain drain represents a safety hazard if inadequately skilled or inexperienced personnel are allowed to fly or maintain our aircraft. Airlines need to train and retrain in a context of scarce capacity. Once trained and qualified, staff migrate to other higher paying jobs. Airlines training needs cover a wide range of disciplines including: maintenance and engineering, flight crew, middle and high level management, commercial management, safety and risk management, etc. Also, training is often delivered in English only, which represents a barrier to non-English speaking organizations (Chingosho, ICAO Panel 3).

Infrastructure

What changes will need to be made at the airline’s facilities? There is a building at their facility at Bole airport dedicated to training, including simulators. Ethiopian currently has maintenance hangars dedicated to smaller turbo-prop, large transport category, component overhaul and engine. They are building a brand new hangar for maintenance to accommodate the new aircraft and ultimately will have three hangars for aircraft maintenance: turbo-prop, narrow body and wide body (tour of Ethiopian Airline facility at Bole Airport, Addis, 2012).

Aircraft delivery schedules (how will these impact their schedule for infrastructure?). Since Ethiopian’s operations are all based at Bole Airport in Addis Ababa, the airport will have to grow in order to accommodate the increased size and number of aircraft, passengers, baggage and cargo. The dimensions of the runways and taxiways must be able to accommodate all of the new large transport category aircraft. An on airport fuel farm and fueling equipment must be able to handle the significantly increasing number of operations. New gates, loading bridges, and baggage handling equipment and terminal space must increase to handle passenger processing needs. Passenger services must be provided such as rest rooms, waiting areas, work space with reliable internet service, and concessions for shopping and eating. Increases in security must also be proportional to the increasing number of passengers and cargo (Powell Interview, April 2011).

New destinations. At each new destination, Ethiopian must secure airport use agreements for passenger processing; including ticket counters, baggage handling, and gates (including waiting areas). The airline must arrange adequate office and work space for flight crews, maintenance personnel and cleaning personnel. For aircraft processing, they must arrange adequate spares inventory for turn-around inspections and replenishments, and common scheduled and unscheduled maintenance. Maintenance personnel must have access to maintenance inspection and repair instruction manuals, usually software based.

Therefore reliable computer technology and internet service is a requirement. Reliable internet service is a rarity in developing countries. Hardware must be purchased, such as tooling and equipment for maintenance and ground handling. Contracts must be arranged for fueling, catering and lavatory services.

Safety

Oversight and governance at Ethiopian Airlines is collaborative effort. The regulatory authority presiding over Ethiopian is the Civil Aviation Authority (CAA). Also, the Federal Aviation Authority is present at Ethiopian in Addis to regulate the facilities and services. Ethiopian complies with International Civil Aviation Organization (ICAO) policies. The African Aviation Authority (AFRAA) is also involved in the oversight at Ethiopian. Ethiopian publishes reports routinely for each of these regulatory agencies and meets the requirements satisfactorily (Terefe Interview, 2011). Recently, the Ethiopian Aviation Academy and Ethiopian MRO secured European Aviation Safety Agency Approval. Ethiopian Airlines Aviation Academy received the European Aviation Safety Agency (EASA) approved part-147 type maintenance training organization certification while Ethiopian MRO Unit received EASA Part 145 approval.
Human Factors and Technology

Ethiopia holds safety as the number one priority, according to their Vision Statement. However, within any business, growth is a hazardous undertaking. In an industry that combines technological complexity with a zero-tolerance for error, too-rapid growth has unique dangers: ValuJet was a startup carrier, formed in 1993 after airlines were deregulated in the United States in 1979; rapid, improvised growth led to numerous mishaps, capped by the crash of flight 592 in the Everglades in 1996 effectively killed the airline. This crash was a very public illustration of Charles Perrow’s concept of a “system accident,” one that results from the complexity and tight coupling of the operational system.

In Valujet’s case, it was the tight coupling of the aircraft, leaving little tolerance for mishandled materiel and little margin for error once airborne, with the complexity of relationships with a maintenance contractor and maintenance procedures, in which unfamiliarity with or misunderstanding of “expired” oxygen canisters led to their shipment in the hold of a passenger flight.

Perrow’s concept, which has been given added dimensionality by “high reliability theory” ( positing that there are measures that can be taken to mitigate or minimize the hazards of complexity and tight coupling), has been extended to the addition of cultural complexity by a research collaboration, “technological peripheries,” that held a workshop in Mexico City in April, 2004. One notable insight from this workshop might be summarized by stating that safety culture does not scale up. Every airline has a commitment to safety; the industry veterans that founded ValuJet were all safety conscious. But as they took on new business relationships, new business commitments, new routes, new obligations, and new team-members, this commitment took a back seat to the more urgent tasks of meeting schedules and growth objectives.

Some of the cultural complexities that go along with expansion into diverse geographic regions include:

- Linguistic differences
- Resource depth
- Authority
- Cooperation and individualism
- External relationships and topology
- Corruption

These are all issues that bear on system complexity and coupling, and also on capabilities for maintaining a resilient and high reliability response. Some of these complexities are more obvious than others. Language differences can be overcome through training, and ICAO has set standards for English proficiency; yet minimal levels of proficiency are not adequate for negotiating and resolving any but the simplest problems. Negotiating such issues as an ambiguous clearance or confusing weather takes additional time if one must code-switch between languages.

Language differences can be viewed as resource issues manageable through commitments and tradeoffs: if an airline is willing to invest sufficiently in language training for its flight crews. Resources such as these often cannot be easily scaled up. An airline operating in Europe can confidently assume a deep pool of available personnel with English as a first or second language; in other regions, this assumption cannot be made, particularly if one is looking for higher levels of competence required for complex negotiations.

As anyone who has operated a field station knows, availability of qualified personnel can be a problem. After language, perhaps the most culturally sensitive issue is authority. (We can reference Jing’s work here.) Air transport, initially growing out of a military background, makes clear assumptions about rank and chain of command.

Yet within these assumptions, there are a number of unanswered questions:
• Is authority absolute? Are there no circumstances under which crew should take over? The recent Jet Blue incident ended without catastrophe because the F/O took actions that, in other circumstances, would be viewed as crew mutiny.

• Which has final authority – live, or automated instructions? The Überlingen crash, between a Federal Express and a Bakhirian aircraft, resulted from different responses to a TCAS advisory and ATC voice instructions.

• Should flight crew, especially cabin crew, ever contradict the CAP? The entire discipline of CRM provides instruction in how and when this is appropriate, but in authoritarian cultures CRM is only a varnish painted over deeply ingrained habitual responses.

• Do informal assumptions regarding authority override written directives? The crash of American 965 in Colombia resulted, in part, from ATC’s unwillingness to correct a hazardous approach; differences in rank and social status made Colombian ATC defer to the US flight crew.

As flight systems become more automated, i.e., less flexible and therefore less negotiable, these issues will stay in the forefront.

A related set of issues is cooperation and individualism. The discipline of Crew Resource Management is derived from Anglophone social psychology, and its success in averting several catastrophes is justly celebrated.

I have observed training manuals in the Far East where the phrase “Crew Resource Management” stood out in Roman letters amidst Chinese orthography, because the phrase did not easily translate into Mandarin. If translating the words is difficult, translating the attitudes and behaviors is even more so. As any enterprise expands, it takes on an enlarged array of external relationships, the management of which adds complexity: the experience of ValuJet with its maintenance contractor Sabretech is illustrative of this. A regional carrier providing point-to-point or hub-and-spoke services among a few pairs of destinations, with its own maintenance sheds and in-house staff, adds several dimensions of complexity when it expands to a networked system of routes. To state this way, taking on new relationships, whether with new contractors or new destinations, is like an injection of steroids into the problem of complexity. In part this comes from new flows of resources, which Operations Research provides insight for managing; but more seriously it comes from flows and collisions of attitudes, which must also be managed.

There is a final issue that I hesitate to bring up, because it could seem to be painting ethnic stereotypes, yet it is an issue in every industry and every region. This is the issue of corruption. Within stable industries, personnel have been socialized into the norms of proper behavior, and develop an intuitive sense of when someone else can or cannot be trusted. Rapidly growing or changing industries – Wall Street, for example – are corruption-prone, particularly if there are large rewards involved. The aviation community tends to be very straight-arrow, and those who are inclined to cut corners are quickly weeded out; an interesting study waiting to be done would be of corruption in commercial aviation, if for no other reason than its findings would probably be quite slim. On the other hand, we know from studies by Transparency International (www.transparency.org ) that some geographic regions are far more corrupt than others. Transparency uses corruption index that ranges from 1 (most corrupt) and 10 (clean or zero corruption). Most countries around the world are between 1to 9. For example, the cleanest top two countries are New Zealand 9.5, Denmark and Finland tied at 9.4,The USA is 7.1 below Qatar&Chile in 2010.

Countries with major African Airlines and their CPX include: South Africa=4.1, Ghana 3.9, Egypt=2.9, Ethiopia=2.7, Nigeria=2.4, Kenya 2.2. Both Nigeria and Kenya are top corrupt states, Ethiopia is a little better. South Africa and Ghana less corrupt and Botswana is the most clean in Africa at 6.1 and ties with Taiwan. China is also corrupt at 3.6 and India at 3.1. The most corrupt countries in the world are North Korea and Somalia which are rogue state and failed states respectively. Corruption affects capacity and sustainability of Airline run by
governments. Effective Good Governance is important to get an Airline of the ground. For example, the most populated African country in Africa Nigeria could never get a national Airline of the ground in spite of oil wealth. Recently it had disaster in accident.

**Environmental Impact.** What is Ethiopian Airlines doing to minimize the negative impact of the environment given that they are increasing the number of airplane operations? According to Ms. Terefe (Interview, 2012), Ethiopian’s management is making conscious decisions to that will enable the airline operations to have less of a negative impact on the environment. They have purchased newer, state-of-the-art fuel efficient aircraft. And they are installing solar power in buildings, including the airport. Training sessions for employees provide information on how to conserve resources, including light, paper and water.

**Economic Impact.** The economic impact of EAL is significant since it employs over 6000 persons across skills and injects significant funding to Addis Ababa business communities ranging from hotels, condos, taxis. EAL brings in several African business persons and diplomats given Addis Ababa is home of African Union and United Nations Economic Commission of Africa and other international organizations including large diplomatic community of African states and nations around the world and their families. So, it has significant multiplier or snowball effect on the country’s economy. It also contributes to tourist industry bringing in people to the land of 13 months sunshine.

Ethiopia has a great potential in tourism. EAL contributes that. She has both historic, cultural and rare animal and bird as well various ethnic groups in its territory. EAL also connects 44 African states to each other and to the world. The financing of Ethiopian is basically from sales revenues and perhaps loans. Since it is not a public company there is no shares sold. It is governed owned company with a management team of 15 persons that includes two women under a CEO that cover different areas of operation. We have met Mr. Samuel Assefa, 2011, who is VP of Ethiopian Aviation who was just coming on the team when we visited. EAL is governed Management Board of 10 persons, all male, directly selected by the Prime Minister. How such board is selected is critical since the board or the PM also appoints the CEO. Ethiopian Airlines’ governance is highly centralized that may impede flexibility and innovation in management. Greater Transparency of selection of Board including CEO is critical. But, Ethiopian has survived through difficult Ethiopian Regimes since 1974, starting in 1945 with American connections through TWA and Boeing later.

That strong historic connection between US-Ethiopia before 1974 created strong national airlines, Airforce, the Navy where Ethiopia was a leader in Africa during imperial period up to 1974 when a Military Dictator influenced by former Soviet destroyed the US-Ethiopia connections, and committed massive human rights.US Government under the Carter Administration abandoned a strong relationship that run for over half a century.

So, Ethiopia became a cold war victim and a former Soviet Union client state. The Soviet Union imploded in 1991. But, EAL survived under both Ethiopian Regimes that ruled since 1974. The Ethiopian CEO insisted to be autonomous during the period of Military rule from 1974-91. The financing basically from investing its profit since EAL has been the most profitable Airline in Africa. Although it is a government owned it has positive impact both in Addis Ababa and Ethiopia. EAL also has several airports to connect other regions of the country. The estimated growth rate the highest in Africa. According to the current CEO Available Seat Kilometers(AS) increased by 24%, passengers carried grew by 19% and freight uplift grew by 20%, and operating revenue reached 24.7 Billion in local currency, increasing by 43% over the previous year 2010 and expenses were 24.3 Billion with 53% increase in fuel cost. The net result of fiscal year 2010/11 was 1.23 Billion in local currency.

With arrival of f B777-200LRs, Ethiopian upgraded the standard of service by enhancing passenger comfort. The new fleet allowed Ethiopian to introduce world-class sleeper seat and state of the art entertainment system in the business class. The B777 is a modern and long-range twin engine worldliner capable of any two cities around the world on daily flight.
has direct daily flights from Addis Ababa to Washington and to Beijing, China. Ethiopian has leading role in transforming Addis Ababa into world class aviation hub of African continent not only for trade, business and tourism. Addis Ababa has become a pivotal link in connecting four continents. Ethiopian plane improvement also the complete replacement of F-50 fleet of the Bombardier Q-400 that has been growing regional and domestic services, which has become the fastest and quietest in its category.

**Future Outlook**

Ethiopia is at the threshold of this aggressive expansion program. Ethiopians’ sustained success of its ambitious plan for will surely evolve, depending on the outcome of factors that includes effective management, excellent training and improvement in safety for which EAL long and successful record. The challenge is whether it is continues this trend and remain autonomous focused on core business. Ethiopia is backward in communication technology and the Internet due to excessive control of the government. Ethiopian also risks significant brain drain of its aviation personnel and the challenges of keeping airline personnel such as pilots, mechanics, waiters, and avoid brain drain to Middle East Airlines that pay much more for aviation such the United Emirates.

According to aviation international news dated May 28, 2012, for Ethiopian Airlines, winning reputation as a world-class has not been easy in a continent not known for service or safety. Seemingly EAL has managed to do that while expanding its fleet to 48 aircraft and its route to 83 destinations. Ethiopian has laid a foundation that will continue to be Africa’s flag carrier to watch for the next decade. Ethiopian recently took delivery of Boeing 777-200LRs and it holds orders for 12 Airbus 350-900 and 10 Boeing 787s, putting it well ahead of several developed world players. The CEO states two Dreamliners to be delivered at the end of 2012 and five to be delivered by the end of 2013. Founded in 1945, the airline is 100% government owned and based on Bole International Airport in Addis Ababa. It serves 66 international destinations, 41 in Africa and 7 in Europe and 17 in the Middle East and Asia. It operates a 24-route cargo network. So, there is no question that Ethiopian the most successful African carrier that is global. Ethiopian may face a challenge from the decision to switch to Airbus that it should rethink seriously. A switch from Boeing will require new culture and language and other structural change. What is not clear is whether the planned decision is a political or business decision. According the head of Ethiopian Aviation Academy, to be effective the air transportation system must be must balance safety and efficient service in a cost-effective manner and overcome the challenges the aviation system that includes: insufficient training capacity in broad range of disciplines, overcome barriers in language, economic and political differences and disparity of national regulatory system and reconcile accountability toward stakeholders and over comes serious coordination problem with rapid expansion to be sustainable.

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Do Foreign Direct Investment and Foreign Aid Promote Good Governance in Africa?
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Blen Solomon, Western Michigan University
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Abstract
The literature on the roles that governance/political and economic stability play to attract capital flows into African economies has been burgeoning. Good governance, liberalization, infrastructure, incentive packages have been regarded as cures to break the deadlock to reverse the economic plight, to attract inflow of capital and, in some cases, to reverse outflows of African economies. The flow of capital, however, has undesirable side effects on host economies’ working conditions, environmental standard, inequality, and culture, among others. These economic and social external or negative spillover effects are due to the phenomenon of “race-to-the-bottom” where companies invest in economies with lax regulations and generous incentive packages. Given the highly expected significant economic impacts of Foreign Direct Investment (FDI) and foreign aid in Africa, it is becoming clear that the increased inflow of FDI and foreign aid may also have impacts on the political institutions and governance of a nation, especially for the case of economically low income African economies. However, these effects of capital flow on democratic institutions and governance of host economies have not been formally addressed. Using data on governance indicators, FDI, and foreign aid recently made available and other control variables, the present study explores whether FDI and foreign aid promotes or retards governance in African economies. Appropriate estimation techniques that take into account endogeneity in the data as well as heterogeneity of the sample countries are employed. The results of the study show that foreign aid (official development aid) has had immediate and persistent positive effects during the study period. Flow of FDI also has positive, though weak, effects on governance but with no persistent effect. Other forms of official flow, with less grant component, have both immediate and lag negative effects on governance in African economies.

Introduction
Presence of democratic institution and good governance are an important input to attract more and genuine foreign and local capital. Especially at the early stage of a country’s development process, foreign investors are looking for stability and effective democratic institutions to invest in a host country. The role that democratic institutions, governance, and political and social stability plays to attract foreign capital has been the focus of the late 1980s and early 1990s empirical works. The belief that foreign capital inflows impose no influence on governance and democratic institution is fading. Anecdotal evidence shows presence of influence of big multinational firms that operate worldwide to have significant impact on small and economically weak states like those in Africa. The significance of this study for the case of African countries is paramount. The economic power of a small African country vis-a-vis a big multinational firm, who are the main foreign direct investors, is comparable for a company to have influential bargaining power. What is the role of capital flow on a country’s governance institutions? Is there a difference between the role of FDI and other forms of capital flow (official development aid other official capital flow)? Do these capital flows have lagged effects or only immediate contemporaneous effects?

The purpose of this study is to determine the extent to which capital flows of different forms have influence on governance and democratic institutions of African countries. The role that capital flows - foreign direct investment, official development aid and other official flows – play to fill savings gap is well documented and early development economics scholars have been promoting increased flow of such capital. Recently, scholars have shifted the gear and have been looking into the role that capital flows play in promoting or retarding governance in developing countries,
although empirical works to substantial the claim is scarce, especially for developing African countries. This study attempts to fill this empirical gap.

**Literature Review**

Most studies focus on the effect of democratic institutions and/or political instability on FDI. For instance, see the studies by Li and Resnik (2003) and Lemi and Asefa (2003). Li and Resnik’s (2003) develop a theoretical model to study this effect of domestic institutions on FDI. They conclude their study by saying that institutions affect FDI in a very complex manner. The complexity of the effect of institutions on FDI stems from the fact that increases in domestic democracy has a positive effect on FDI inflows because increases in democracy are associated with improved property rights. However, they also find that increases in democracy reduce the FDI received by these countries. They explain their conflicting findings by stating that while increased democracy helps the judicial system and rule of law, it also drives foreign investors away by imposing constraints on foreign capital and the host government. Similarly, Lemi and Asefa (2003), with focus on African states, address the same issue and show that there is differential effect of governance on different industries due to the nature, size and objectives of the FDI firms that enter African economies. The inclusive nature of the direct effect of FDI on democracy and the cautions placed on the interpretation of the results call for consideration of the reversal of cause and effect assumptions. Recently, the influence of capital flow on democratic institution has been getting attention as its influence seems apparent. As globalization in developing countries is gathering momentum, it is important to assess how democratization is being affected in this environment. This effect of globalization on domestic democratic institutions has been investigated by many theoretical as well as empirical studies.

However, the studies have not come to a consensus on the effect of globalization. The key globalization components considered in most of these studies are flows of capital as well as goods and services. Li and Revenue (2003) categorize the findings of these studies into three groups. One category finds that globalization enhances democracy while the second group finds the opposite; the third group however finds that globalization does not affect democratic institutions. Due to these conflicting findings, Li and Revenue (2003) investigate the effect of four national aspects of globalization on the effect of democracy for 127 countries during the period 1970 – 1996 by using a pooled time-series cross sectional statistical model. They find that two out of the four national aspects of globalization, namely, trade openness and portfolio investment inflows erode the prospects for democracy. On the other hand, the other two aspects of globalization, FDI and the spread of democratic idea flows, affects democracy positively. Huntington (1991) confirms this finding by asserting that global economic integration helps in the diffusion of democratic ideas which in turn lead to domestic democratization. Contrary to Li and Revenue’s (2003) findings, Rudira (2005) by using a sample of 59 developing countries claims that trade and capital flows will be associated with enhanced democratic rights if social groups receive sufficient compensation for their (potential and actual) losses. His findings challenge popular views that the globalization automatically guarantees greater political freedoms. He also claims that it is invalid to assume that the expansion of democratic rights in the least developed countries (LDCs) necessarily preceded globalization.

On the other hand, some studies have questioned how globalization affects domestic political power. Berger (2000) focuses on studies that use international trade theory to derive political models used for observing the links between globalization and institutions. One of the most important predictions of these political models is that globalization shrinks the power and sovereignty of the nation. This prediction stems from two arguments, one being the notion that the magnitude and velocity of international economic exchanges erode the state’s capabilities. The other is the argument that the extension of market relations across national borders diminishes the citizen’s attachment to national authority, leading to a decline in the legitimacy of central governments. He argues that the spread of neoliberal doctrines, an outcome of globalization, has
reduced the legitimacy of state involvement in the economy as well as reducing the government’s ability to shape or change market outcomes.

Although, the literature on the impact of globalization on domestic institutions is vast, there is only one study that we are aware of analyzing the effect of capital flow - in the form of official development aid, other official flows - on the domestic governance of African economies. The study by Goldsmith (2001) looks into how foreign aid influences statehood in Africa. The present study is different from Goldsmith’s (2001) in that the later covers only foreign aid whereas as this study looks into three different components of capital flow including foreign aid. The sample size, and governance indicators and methodology are also different. We employ larger sample, more advanced methodology as well as improved governance indicator.

For purpose of comparison, it is important to look into these forms of capital flows, especially for the case of African economies not only due to the sheer size of the flow of these components but also the power they have vis-a-vise the economic power of individual African economies. The purpose of this study is to fill this empirical gap. Using data on political indicators and foreign aid recently made available, our study explores whether FDI and foreign aid promote or retard governance in African economies.

**Methodology and Data**

Flow of capital is intertwined with other major macroeconomic variables and governance of a country. Depending on the types and forms of capital flow, foreign capital may correlate with financial, exchange rate, prices, interest rate, GDP and governance, among others, of a host country. Direct investment and foreign aid are slow flows and pose less risk on the stability of a country’s financial system compared to portfolio flows. On top of this, official flows (grant or market based) as opposed to private flows create less impact on financial instability, as they are not entirely driven by market forces. As these capital flows influence domestic market performance, their influence may also correlate with other major macroeconomic variables. In addition, countries or investors who send money to recipient countries look into the performance – initial conditionality and governance- of the economy to commit to the official flow of capital. Such interrelation between the flow of capital and other macroeconomic and governance indicators call for appropriate technique to account for the endogeneity of the variables of interest. A study that looks into the link between capital flows and governance variables does not escape the problem of endogeneity.

Sample countries are drawn from Africa over the period 1975-2002. These sample countries have differences in history, culture, governance, and size. Given the panel nature of the data with such heterogeneous countries as a sample, correction for group-wise heterogeneity of the data is warranted. Hence, appropriate estimation technique should be used to account for the problems for the robustness of the results.

It is difficult, if not impossible to account for all estimation problems at once in one estimation technique. However, it is appropriate to correct for each of these problems one at a time and compare the results from each estimation technique. This is because one of the problems may be the source of the other problem in estimation. To this effect, three different estimation techniques are employed here. The first one is heterogeneity corrected generalized least square to account for the group-wise heteroscedasticity of error terms. The second technique is simple instrumental variable (IV) estimation that account for only endogeneity of some of the variables in question. The last approach accounts for both problems at once, robust instrumental variable estimation, which takes into account both heteroskedasticity and endogeneity. One of the nice features of the last estimation technique is that it allows test for the validity of the instruments used. Specifically, it allows a test of overidentifying restrictions (Hansen-Sargan Test) and likelihood ratio test of whether the equation is identified. The first test confirms validity of the instruments used and the second test confirms that the excluded instruments are irrelevant. Both tests are performed for the last specification and results are presented along with the regression coefficients.
The general form of the estimation equation is as follows:

\[
governance = f(\text{foreign aid}, FDI, \text{other official flow}, \text{control variables})
\]

Three components of capital flow are considered: foreign aid—measured by official development aid (ODA), foreign direct investment (FDI), and other official flows (OOF). The control variables used in the estimations are those variables believed to have influence on governance and the operation of democratic institutions of a country. These variables are income (gross domestic product per capita), debt burden (debt service ratio to national income), dependency ratio (number of dependents per working population), and adjusted national saving (education expenditure per national income). Greater per capita income, and higher adjusted national savings are believed to promote democracy, as these are the key economic indicators that forms the building block of democratic institutions of a country. On the other hand, international dependency (measured by debt burden) and domestic dependency (measured by dependency ratio) are believed to retard democracy by weakening the power of the government both internationally and domestically.

The instruments used in the estimation of IV models are labor, export, import, gross capital formation, telephone mainlines, and polity. These instruments are believed to affect the flow of the components of capital considered in this study. Not only flow of market based capital flows (FDI and to some extent OOF) but also flows with large grant component (ODA) are also influenced by these control variables. The first stage results of the IV models are not reported here, but are available on request.

Apart from the assumption of contemporaneous – immediate- effects of capital flow on democratic institutions, it is also logical to assume that there may be lag effects from these capital flows on the governance and democratic institutions of a country. To this effect, lagged values of the three capital flows (LAGODA, LAGFDI, LAGOOF) variables are used instead of the contemporary variables to see if there is any lag effect. Two different lag effects are considered: one-year lag and three-year lags. Results of the lag effects are presented in Appendix.

For all the three different estimation techniques, similar approach is employed. First, all the three capital flow components are placed in one equation to see their simultaneous effects. Later, to see the separate individual effects, for each capital flow components separate equation is estimated using single capital flow component and all other control variables. The same approach is followed for lag effect estimation.

**Data.** Sample countries are drawn from Africa based on availability of data on capital flows, other major development indicators, and governance (democratic institution) indicators. Forty-four countries are selected, and the study covers the period 1975-2002. Capital flow variables are drawn from UNCTAD, Handbook of Statistics, CD-ROM 2003. The other development indicators that are used as control variables are obtained from World Bank, World Development Indicators.

Three capital flow components are considered: Official Development Aid (ODA), Other Official Development Flow (OOF) and Foreign Direct Investment (FDI). ODA is official aid with more than 25% grant component, whereas OOF are official flows with less than 25% grant component. See the appendix for detailed explanation of the variables. Table 1A in appendix presents the descriptive statistics of the model variables. Descriptive statistics of the model variables show significant variations among countries of the region. The mean values of the model variables for each country for the years 1975-2002 is presented in the table. DEMOC variable that ranges from 0 to 10, is close to 10 for Mauritius and close to 0 for Congo Republic, Egypt, Gabon, Libya, Rwanda, and Swaziland. The mean value of debt service ratio to national income ranges from over 14% for Angola and below 1% for Rwanda. Ratio of FDI inflow to GDP ranges from over 22% for Central African Republic to less than 1% for Nigeria, South Africa, Togo, Egypt, and others. Ratio of ODA to GDP also ranges from over 47% for Guinea-Bissau to less than 1% for
Libya and Algeria. Ratio of other official flow is highest for Gabon (17.7%) and lowest for Guinea (less than 1%).

**Results**

Estimation results of the contemporaneous effects are presented in Tables 1-3 below. The results for the lagged effects are presented in Appendix Tables A.1 – A.3. Table 1 below presents the results for heteroscedasticity adjusted GLS (Generalized Least Square) estimation. Where as Tables 2 present results for instrumental estimation with out heteroscedasticity correction and Table 3 presents IV estimation with correction for heteroscedaticity. The contemporaneous and lagged effects results are similar with slight difference for FDI flows. In each table, four estimation results are presented.

The first result is for estimation that uses all the three capital flow components at once. The other three estimation results are for the three components of capital flows (ODA, FDI, and OOF) estimated separately. The fitness test of the three models reveal that the specification is acceptable by the standard test statistics indicated in the tables. For the heteroscedasticity corrected GLS and IV models, wald tests show the significance of coefficients in almost all specifications. For the robust IV estimation, tests for instrument relevance (Anderson Canonical LR test) and equation identification (Hanson-Sargan test) are presented. In almost all specifications, the former test confirms the relevance of the instruments as indicated for each specification, whereas the later test fails to support the validity of the instruments. It is understandable that in IV models getting the right instruments is one of the major problems.

<table>
<thead>
<tr>
<th></th>
<th>All Flows</th>
<th>ODA</th>
<th>FDI</th>
<th>OOF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Official Development Aid</td>
<td>3.006***</td>
<td>2.330**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(3.964)</td>
<td>(3.247)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Official Flows</td>
<td>-1.271***</td>
<td>-0.985***</td>
<td>-0.985***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-4.362)</td>
<td>(-3.674)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FDI inflow</td>
<td>-0.172</td>
<td>-0.022</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-0.662)</td>
<td>(-0.091)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP Per Capita</td>
<td>0.055**</td>
<td>0.050**</td>
<td>0.056**</td>
<td>0.036*</td>
</tr>
<tr>
<td></td>
<td>(3.016)</td>
<td>(2.788)</td>
<td>(3.154)</td>
<td>(2.190)</td>
</tr>
<tr>
<td>Debt Service Per GDP</td>
<td>-0.024</td>
<td>-0.027*</td>
<td>-0.021</td>
<td>-0.021</td>
</tr>
<tr>
<td></td>
<td>(-1.868)</td>
<td>(-2.079)</td>
<td>(-1.566)</td>
<td>(-1.715)</td>
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<tr>
<td>Adjusted Saving(Education)</td>
<td>0.003</td>
<td>0.007</td>
<td>-0.066</td>
<td>-0.023</td>
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<td></td>
<td>(0.081)</td>
<td>(0.181)</td>
<td>(-1.411)</td>
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<td>Age-Dependency Ratio</td>
<td>-2.723***</td>
<td>-2.519***</td>
<td>-2.435**</td>
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<td></td>
<td>(-4.148)</td>
<td>(-3.955)</td>
<td>(-3.085)</td>
<td>(-4.939)</td>
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<td>Constant</td>
<td>2.952***</td>
<td>2.705***</td>
<td>3.160***</td>
<td>3.578***</td>
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<tr>
<td></td>
<td>(4.490)</td>
<td>(4.219)</td>
<td>(4.042)</td>
<td>(6.189)</td>
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<tr>
<td>Number of Observations</td>
<td>863.000</td>
<td>938.000</td>
<td>914.000</td>
<td>921.000</td>
</tr>
<tr>
<td>Chi2</td>
<td>88.70657</td>
<td>54.55733</td>
<td>38.89038</td>
<td>70.95273</td>
</tr>
</tbody>
</table>

*Table 1. Heteroscedasticity corrected GLS: Dependent Variable is Democracy. * p<0.05, ** p<0.01, *** p<0.001; Values in parentheses are z-values.*

The results show that official development aid (ODA) has significant positive effect on governance in African economies. This result holds in all alternative estimation techniques employed. The lag effect results also confirm the contention that the effects of ODA persists even after the commitment is made. The result confirms that the effect persists up to three years. Other
forms of official flows (OOF), on the other hand, have significant negative effect. This is a complete opposite to ODA. Official flows with less grant component help deteriorate democracy in Africa or help keep autocrats in power. The lag effects also support the same view, in that OOF has negative lag effects up to three years in negatively affecting democratic institutions in Africa.

The control variables have rather mixed results. Some of them have signs consistent with the a priori expectations, while others have different signs and level of significance for different specification. Two of the four control variables (GDP per capita and age-dependency ratio) have, for most specifications, the expected signs. GDP per capita has positive and significant effect on democracy. As stated earlier, income can serve as one of the necessary conditions to promote democracy. On the other hand, age-dependency has negative and significant effects in most specification, which confirms earlier assertion that high level of domestic dependence hinders progress towards democracy.

The other two control variables, debt burden, and adjusted saving (share of education expenditure) do not have the expected signs and the results are not consistent from specification to specification. One would expect that debt burden, measured by the share of debt service to income to impede progress towards democracy however, for two of the four specifications the variable has positive and significant effects, which is contrary to expectation. Adjusted saving has the expected sign for all specification except two. It has significant positive effect on governance in Africa.

Table 2. Instrumental Variable Estimation: Dependent Variable is Democracy

<table>
<thead>
<tr>
<th></th>
<th>All Flows</th>
<th>FDI</th>
<th>ODA</th>
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Number of Observations  | 823.000   | 823.000 | 859.000 | 824.000 |
Overall R2               | .2149993  | .0075333| .0673959| .0153206|
Between R2               | .3071627  | .0866117| .0627174| .0948789|
Chi2                     | 175.5945  | 12.36344| 129.1035| 48.26318|
Model P-value            | 1.66e-34  | .0301333| 3.69e-26| 3.14e-09|
Rho                      | .3318205  | .5174088| .0  | .1837187 |

* p<0.05, ** p<0.01, *** p<0.001; Values in parentheses are z-values.

Table 3. Robust Instrumental Variable Estimation: Dependent Variable is Democracy

Volume 1, Issue 1 (Fall 2013)
Foreign direct investment (FDI) has positive, but weak, effect on governance and its effect is not persistent like the other two forms of capital flows. FDI is driven by market forces, as opposed to the other two forms of capital flow, which makes it less influential in the area of governance. It is also true that the flow of FDI is so low compared to ODA and OOF to have a significant and persistent influence on governance. The result confirms that if there is any effect from FDI on governance, it is positive. This result supports the view that market based flows of capital are in favor of democratic institution that guarantee property right and efficient government institutions.

Unlike the results for the other two forms of capital flow, there is no evidence to support lagged influence from FDI on governance in African economies. This positive effect of FDI on governance may not refute the view that FDI flows more to economies with lax regulation and standards, which has little to do with the quality of governance and democratic institutions. However, the result refutes the contention that FDI flows to a country with bad governance to manipulate the official to secure monopoly and oligopoly power.

One of the implications of the results is that ODA, compared to OOF is good to promote democracy. Are the difference between the two only the grand component or there is something else that differentials the two. The fact that the later has less grant component also imply less control by donors to trace the destinations and the actual uses of the money. What makes OOF different from FDI is that it may not be based on market forces and mostly it is through bilateral agreement between countries for friendship or security reasons. These kinds of official flows may have negative implication for democracy since there is no strict accountability for this.

The results of this study do not support of refute the highly believed view among scholars that foreign aid does not promote economic development. But it sheds light on the fact that official
development aid can prepare the ground work by improving governance and democratic institutions, which in turn is believed to promote economic development.

Conclusions

The fact that official development assistance (ODA) has significant positive effects on good governance in African economies is interesting. These results should be qualified by pointing out that whether ODA may enhance or retard democracy may depend on the type of assistance, how it is delivered, and its composition. It is quite possible for aid to promote democracy, if it is targeted to education, training, civil society groups such as women’s groups, and effective NGOs. It also depends on whether basic accountability and transparency are present in the governance of the country receiving aid.

The results of this study also show the impact of FDI on governance is positive, though weak. This result is less surprising since governments may have incentives to attract FDI by improving their efficiency and accountability. A significant and sustained FDI is also one of the best ways of promoting economic growth and reducing poverty. In this regard, East Asia’s success in promoting poverty reducing economic growth is due to its ability to attract FDI. Africa today receives the least proportion of FDI of all developing regions of the world, and it is the single region with greatest increase in poverty. In African economies where 70% of the population on the average is currently in agriculture, massive investment in agriculture, especially in the areas of agro-processing industry is crucial. For these countries to attract significant FDI to agriculture and agro-processing industries, it is important that private citizens have a secured property right including land rights.

Africa needs to grow the private sector rapidly to promote employment, independence of government or civil service employment. It is not apparently clear why other official flows (OOF) has consistent negative effects on governance in Africa. Compared to the other forms of capital flow, it seems that African democratic institutions and the effecting functioning of governance is persistently eroded by the inflow of this forms of official inflow. One needs to investigate further the type, purpose, and terms of these forms of capital inflow to know the core of the problem. Given the aggregate nature of the dataset used, it is not possible to see the nature of the flow in more detail. Future research should look into the details of each flow to understand the issue even better.

References

Li, Quan, and Adam Resnick. 2003. Reversal of Fortunes: Democratic Institutions and Foreign Direct Inflows to Developing Countries. International Organization 57, no. 1:175-211.
Appendix: Data


OFFICIAL DEVELOPMENT ASSISTANCE (ODA): Grants or loans to developing countries that are undertaken by the official sector with the promotion of economic development and welfare as the main objective at concessional financial terms (if a loan, having a grant element of at least 25%).

OTHER OFFICIAL FLOWS (OOF): Transactions by the official sector with developing countries. OOF is flow which do not meet the conditions for eligibility as OFFICIAL DEVELOPMENT ASSISTANCE or OFFICIAL AID, either because they are not primarily aimed at development, or because they have a GRANT ELEMENT of less than 25%.

FOREIGN DIRECT INVESTMENT (FDI): is a private investment made to acquire or add to a lasting interest in an enterprise in a country on the DAC List of Aid Recipients. “Lasting interest” implies a long-term relationship where the direct investor has a significant influence on the management of the enterprise, reflected by ownership of at least 10% of the shares, or equivalent voting power or other means of control. In practice it is recorded as the change in the net worth of a subsidiary in a recipient country to the parent company.

IMPORTS: Imports of goods and services in millions of dollars
EXPORTS: Exports of goods and services in millions of dollars

Development Indicators from World Bank, World Development Indicators, 2003
GDP: Gross Domestic Product of a host country (constant 2000 US$)
GDP per Capita (GDPPC): GDP per capita (constant 2000 US$)
Gross Capital Formation per GDP (GCFPGDP): Gross fixed capital formation as a percentage of GDP of the host country
Total Debts Service (TDEBTS): External debt Service as a percentage of GDP
Telephone Main Lines - Mobile phones (per 1,000 people)
Adjusted Savings - education expenditure (% of GNI)
Dependency Ratio - Age dependency ratio (dependents to working-age population), population with age 0-14 divided by working age population, 15-64.

Democracy: Indicator of the degree of institutionalized democracy, rating ranges from 0 to 10. Autocracy: Indicator of degree of institutionalized autocracy, rating ranges from 0 to 10. This is opposite of democracy.
Civil Liberty: Indicator for civil liberty (including freedom of speech and expression of views and free press). Rating ranges from 0 to 7.
Political Right: Indicator of political right (including freedom of expression of political views). Rating ranges from 0 to 7

Variable: ADJSAV (adjusted saving- education expenditure to national income), DEPRATIO (dependency ratio), TDEBTS (debt service per national income), DEMOC (institutionalized democracy), AUTOC (institutionalized autocracy), CIVILL (civil liberty), POLITICALR (political right), FDIINF (FDI inflows), TODAOA (total official development aid), TOOF (total other official flows), RFIDIINF (ratio of FDI inflow to GDP), RTODAOA (ratio of ODA to GDP), RTOOF (ratio of OOF to GDP). * all values are in millions of dollars.
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<td>0.001</td>
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<td>258.222</td>
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<td>0.016</td>
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<td>798.726</td>
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<td>-0.013</td>
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<td>Togo</td>
<td>158.504</td>
<td>122.919</td>
<td>9.678</td>
<td>0.150</td>
<td>0.122</td>
<td>0.109</td>
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<tr>
<td>Tunisia</td>
<td>120.651</td>
<td>235.548</td>
<td>163.022</td>
<td>0.009</td>
<td>0.022</td>
<td>0.134</td>
</tr>
<tr>
<td>Uganda</td>
<td>89.228</td>
<td>405.867</td>
<td>0.256</td>
<td>0.041</td>
<td>0.138</td>
<td>0.013</td>
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<tr>
<td>Zambia</td>
<td>132.558</td>
<td>499.311</td>
<td>17.515</td>
<td>0.043</td>
<td>0.169</td>
<td>0.069</td>
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<td>Zimbabwe</td>
<td>119.388</td>
<td>261.326</td>
<td>31.411</td>
<td>0.020</td>
<td>0.045</td>
<td>0.057</td>
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<td>Total</td>
<td>88.608</td>
<td>317.126</td>
<td>48.995</td>
<td>0.047</td>
<td>0.119</td>
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*Table 1A Continued*
Table A.1. Heteroscedasticity corrected GLS with Lags: Dependent Variable is Democracy

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<tr>
<th>All Flows</th>
<th>ODA</th>
<th>FDI</th>
<th>OOF</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Year Lag of ODA</td>
<td>-8.887***</td>
<td>22.130***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-3.645)</td>
<td>(11.467)</td>
<td></td>
</tr>
<tr>
<td>One year lag of OOF</td>
<td>-38.722***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-21.473)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One year lag of FDI</td>
<td>56.428***</td>
<td>55.857***</td>
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</tr>
<tr>
<td></td>
<td>(9.752)</td>
<td>(11.156)</td>
<td></td>
</tr>
</tbody>
</table>
| GDP Per Capita | 0.221*** | 0.171*** | 0.063*** | 0.241***
| | (13.549) | (8.571) | (3.733) | (19.580) |
| Debt Service Per GDP | 0.075*** | -0.018 | -0.008 | 0.067***
| | (6.618) | (-1.678) | (-0.782) | (5.342) |
| Adjusted Saving(Education) | 0.012 | -0.063 | -0.056 | 0.012 |
| | (0.366) | (-1.766) | (-1.431) | (0.336) |
| Age-Dependency Ratio | 1.665** | -3.636*** | -3.222*** | 0.891 |
| | (2.624) | (-5.815) | (-4.452) | (1.292) |
| Constant | -0.180 | 1.200 | 2.775*** | 0.507 |
| | (-0.295) | (1.811) | (3.830) | (0.767) |

Number of Observations | 812.000 | 812.000 | 812.000 | 812.000
Chi2 | 935.3368 | 163.0154 | 158.124 | 1379.166
Log Likelihood | -1571.669 | -1649.863 | -1692.301 | -1596.872

* p<0.05, ** p<0.01, *** p<0.001; Values in parentheses are z-values.

Three years lag

<table>
<thead>
<tr>
<th>All Flows</th>
<th>ODA</th>
<th>FDI</th>
<th>OOF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three Years Lag of ODA</td>
<td>1.401</td>
<td>21.324***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.503)</td>
<td>(10.156)</td>
<td></td>
</tr>
<tr>
<td>Three years lag of OOF</td>
<td>-30.657***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-13.892)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Three years lag of FDI</td>
<td>32.516***</td>
<td>50.660***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(4.721)</td>
<td>(8.596)</td>
<td></td>
</tr>
</tbody>
</table>
| GDP Per Capita | 0.235*** | 0.164*** | 0.065*** | 0.221***
| | (12.142) | (7.664) | (3.607) | (15.892) |
| Debt Service Per GDP | 0.040** | -0.024 | -0.028* | 0.035*
| | (2.646) | (-1.834) | (-2.069) | (2.300) |
| Adjusted Saving(Education) | 0.011 | -0.072 | -0.065 | 0.049 |
| | (0.247) | (-1.773) | (-1.399) | (1.130) |
| Age-Dependency Ratio | 0.243 | -3.650*** | -2.836*** | -0.027 |
| | (0.338) | (-5.473) | (-3.749) | (-0.037) |
| Constant | 0.150 | 1.460* | 2.709*** | 1.377 |
| | (0.214) | (2.039) | (3.539) | (1.909) |

Number of Observations | 732.000 | 732.000 | 732.000 | 732.000
Chi2 | 502.032 | 139.3392 | 102.0151 | 993.0181
Log Likelihood | -1489.106 | -1519.56 | -1552.383 | -1503.549
Foreign Direct Investment in Africa

* p<0.05, ** p<0.01, *** p<0.001; Values in parentheses are z-values.

Table A.2. Instrumental Estimation with Lags: Dependent Variable is Democracy

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<th>OOF</th>
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<td>1.181</td>
<td>0.181</td>
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<tr>
<td></td>
<td>(0.899)</td>
<td>(0.137)</td>
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<td></td>
</tr>
<tr>
<td>One Year Lag of ODA</td>
<td>5.100***</td>
<td></td>
<td>79.906***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(4.224)</td>
<td></td>
<td>(8.300)</td>
<td></td>
</tr>
<tr>
<td>One year lag of OOF</td>
<td>0.199</td>
<td></td>
<td></td>
<td>-25.173***</td>
</tr>
<tr>
<td></td>
<td>(0.333)</td>
<td></td>
<td></td>
<td>(-4.813)</td>
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<tr>
<td>GDP Per Capita</td>
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<td>0.012</td>
<td>0.629***</td>
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<td>(1.316)</td>
<td>(0.384)</td>
<td>(8.136)</td>
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<td>Debt Service Per GDP</td>
<td>-0.014</td>
<td>-0.003</td>
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<td>0.716**</td>
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<td>(-0.907)</td>
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<td>Age-Dependency Ratio</td>
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<td>-4.848***</td>
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<td>(0.531)</td>
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<td>0</td>
<td>.3009666</td>
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* p<0.05, ** p<0.01, *** p<0.001; Values in parentheses are z-values.

Three years lag

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<td>GDP Per Capita</td>
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<td>-0.026</td>
<td>-0.060</td>
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http://scholarworks.wmich.edu/ijad
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<td>.7402082</td>
<td>.0897255</td>
<td>.1183882</td>
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* p<0.05, ** p<0.01, *** p<0.001; Values in parentheses are z-values.

Table A.3. Robust Instrumental Estimation with Lags: Dependent Variable is Democracy

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<td></td>
<td>FDI</td>
<td>ODA</td>
<td>OOF</td>
<td></td>
</tr>
<tr>
<td>One year lag of FDI</td>
<td>-0.697</td>
<td>-0.340</td>
<td></td>
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<td></td>
<td>(-0.721)</td>
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<td>One Year Lag of ODA</td>
<td>3.898</td>
<td></td>
<td>125.917***</td>
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<td></td>
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<td>One year lag of OOF</td>
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<td>-18.490***</td>
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<td></td>
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<tr>
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<td>0.020</td>
<td>0.636**</td>
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<td>(1.095)</td>
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<td>0.013</td>
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<td>(-1.829)</td>
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<tr>
<td>Adjusted Saving(Education)</td>
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<td>-0.464**</td>
<td>0.496</td>
<td>0.808**</td>
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<td>(-2.447)</td>
<td>(-2.909)</td>
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<td>(2.856)</td>
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<td>Age-Dependency Ratio</td>
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<td>-2.585*</td>
<td>3.232</td>
<td>7.380*</td>
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<tr>
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<td>(-1.017)</td>
<td>(-2.231)</td>
<td>(0.546)</td>
<td>(2.150)</td>
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Number of Observations | 786.000 | 798.000 | 873.000 | 835.000 |
Prob>F | 0.000 | 0.000 | 0.008 | 0.003 |
Hanson J statistics | 197.072 | 182.140 | 7.478 | 89.664 |
P-value | 0.000 | 0.000 | 0.024 | 0.000 |
Identification LR test | 27.355 | 27.167 | 26.867 | 21.615 |
P-value | 0.000 | 0.000 | 0.000 | 0.001 |

* p<0.05, ** p<0.01, *** p<0.001; Values in parentheses are z-values.

Three years lag

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<td>(1.853)</td>
<td>(0.763)</td>
<td>(4.658)</td>
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<td>Debt Service Per GDP</td>
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<td>-0.005</td>
<td>-0.085</td>
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<tr>
<td></td>
<td>(-0.080)</td>
<td>(-0.162)</td>
<td>(-1.558)</td>
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Volume 1, Issue 1 (Fall 2013)
### Adjusted Saving (Education)

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<th>Standard Error</th>
<th>t-value</th>
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<td>-0.255</td>
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<td>(Education)</td>
<td>(-0.979)</td>
<td>(-1.470)</td>
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### Age-Dependency Ratio

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<th>Standard Error</th>
<th>t-value</th>
<th>P-value</th>
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<tr>
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<td>-2.166</td>
<td>-1.704</td>
<td>3.371</td>
<td>12.137*</td>
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<td>Ratio</td>
<td>(-1.658)</td>
<td>(-1.307)</td>
<td>(1.001)</td>
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### Summary Statistics

- **Number of Observations**: 729.000, 743.000, 820.000, 783.000
- **F Statistics**: 9.676, 8.481, 10.474, 3.526
- **Prob>F**: 0.000, 0.000, 0.000, 0.004
- **Hanson J statistics**: 156.829, 175.031, 11.669, 50.828
- **P-value**: 0.000, 0.000, 0.003, 0.000
- **Identification LR test**: 6.347, 8.186, 75.950, 21.336
- **P-value**: 0.274, 0.146, 0.000, 0.001

* p<0.05, ** p<0.01, *** p<0.001; Values in parentheses are z-values.
The Need for Interdisciplinary Research and Education for Sustainable Human Development to Deal with Global Challenges
Solomon Bililign, North Carolina A&T State University

Abstract
Major issues in society - developing alternate sources of energy and a sustainable environment, improving health, and minimizing the effects of climate change require a collective effort by different disciplines working in interdisciplinary groups. Indeed, the boundaries between the different disciplines are becoming increasingly blurred. Society’s responses to major social challenges must be informed by an improved understanding of human perceptions, responses, and of the economic and social impacts of the physical, and biological processes to promote social wellbeing. A comprehensive understanding of the main social challenges requires the collaboration of physical scientists, social scientists, humanities scholars and engineers, and will be highly interdisciplinary. For example climate systems are highly variable, changing in hours, days or years. The need to create a new generation of students who combine a rigorous disciplinary depth with the ability to reach out to other disciplines and work in interdisciplinary teams is more urgent. Because these skills cut across traditional disciplinary boundaries, there is increasing support from government and business for the interdisciplinary programs that focus on identifiable long-term problems in the economy, society, and government, as opposed to department-based programs that focus on academically defined disciplinary paradigms. Interdisciplinary research preparation and education are central to future competitiveness, because knowledge creation and innovation frequently occur at the interface of disciplines. Interdisciplinary programs help to ensure better educational programs, which give students better ability to work in a problem-oriented way and at the same time the ability to think across fields and interact. It responds to the need to prepare students for an increasingly interdisciplinary, collaborative, and global job market. Interdisciplinary programs provide opportunities to strengthen the interaction between the business sector and research, especially in relation to the humanities and social science research and education, where interaction has been especially underdeveloped. There is a consensus that the current academic administrative structure is the most important barrier to interdisciplinary collaboration; other barriers like poor communication, etc., emanate from it. How can interdisciplinary education and research flourish while maintaining strong backgrounds in the disciplines? How can universities lower or remove barriers to faculty participation in interdisciplinary education and research and create porous, flexible, less redundant environment that facilitates the flow of ideas, people and resources across disciplinary boundaries? Is possible to have disciplines without disciplinary departments? In this short paper, the barriers and the challenges for developing interdisciplinary education and research will be summarized, lessons from some successful attempts and failures will be presented, and some approaches will be recommended for newly established institutions of higher education if the developing world such as Africa further discussion.

Introduction
The National Academy of Sciences defines interdisciplinary research (IDR) as “one of the most productive and inspiring of human pursuits—one that provides a format for conversations and connections that lead to new knowledge” (National Academies, 2005). It links and integrates theoretical frameworks from two or more disciplines and employs methods and skills from them (Aboelela, 2007). Interdisciplinary thinking and the creation of interdisciplinary programs, research groups, centers and institutes are rapidly becoming integral features of academia as the issues and challenges facing society become more global and complex. Such global and complex problems require the collaboration of multiple disciplines. The educational backgrounds needed by those who will meet these challenges cannot be provided by a single discipline. Our future researchers will require skills, information, and/or methodologies
traditionally compartmentalized in disciplinary programs. It is not possible to study the Earth’s climate, for example, without considering the oceans, rivers, sea ice, atmospheric constituents, solar radiation, transport processes, land use, land-cover, remote sensing, etc. Furthermore, severe climate anomalies and disasters are processes in which the physical, biological and socio-cultural systems interact at their limits. The destructive impacts of natural hazards lead to material losses, deaths and physical and psychological stresses for the affected communities. Such events offer insight into people's perceptions of and relationship to environmental forces (Pfister, 2007). It is therefore evident that the study of climate change requires the collaboration of scientists, engineers, social scientists, humanities scholars, health sciences practitioners, agricultural scientists and policy makers to have a comprehensive understanding its implications, impacts and mitigation.

Other major issues which face society—sustainable energy, a sustainable environment, improved health, food security, sustainable development, and an understanding of complex socio-environmental problems (Morse et al., 2007) require a collective effort by different disciplines working in interdisciplinary groups. Policy makers and the public are increasingly demanding that scientists inform them of the socio-economic impacts of their research. Making decisions for changes in policy requires the integration of scientific information and data on the social impacts (Heberlein, 1988). A comprehensive understanding of these issues cannot be achieved solely through a disciplinary approach.

The need to prepare students for an increasingly interdisciplinary, collaborative, and global job market also calls for providing opportunities for interdisciplinary training of students. There is growing evidence that retention of students in STEM areas can be facilitated by enhanced interdisciplinary education and research (National Academy of Sciences, 2005). Students show increasing enthusiasm about problems of global importance that have practical consequences - all of which can best be addressed through IDR (Golding, 2009). Students, especially undergraduates are strongly attracted to interdisciplinary research and courses, especially those of societal relevance (National Academy of Sciences, 2005). Students need to learn to communicate effectively across disciplines, cultures and industries to be effective contributors to the economic development of a nation (Eagan, 2002).

There is also growing interest in interdisciplinary research among faculty in academe because the lines between "traditional" fields are increasingly blurred. The intellectual boundaries of today’s research may not map onto disciplinary frameworks developed and organized over centuries. Therefore federal funding agencies such as the National Institutes of Health (NIH) and the National Science Foundation (NSF) have furthered this blurring by offering support for research that is explicitly "cross-cutting" or "bridging" between and among disciplines. For example, the National Science Foundation recently stated “NSF has long recognized the value of interdisciplinary research in pushing fields forward and accelerating scientific discovery. Important research ideas often transcend the scope of a single discipline or program. NSF also understands that the integration of research and education through interdisciplinary training prepares a workforce that undertakes scientific challenges in innovative ways. Thus, NSF gives high priority to promoting interdisciplinary research and supports it through a number of specific solicitations.” Unfortunately, even the funding agencies are structured along disciplinary lines and reviews are conducted by disciplinary experts, who may not necessarily have the experience or the appreciation of interdisciplinary efforts. NIH has identified interdisciplinarity as an essential strategy to discover needed knowledge and made it an explicit priority in its recent roadmap.

There is a consensus among educators, university leaders, business leaders, and policy makers, federal agencies, and scientific associations on the need to advance interdisciplinary educational programs and research opportunities for students. Such an education prepares them to be competitive in the global market and provides them with a wider array of employment opportunities. However, the fact that interdisciplinary research can happen only when it is done...
by disciplinary experts, who remain leaders in their field is often overlooked. Any advantages which interdisciplinarity holds depend on the presence of experts with strong backgrounds in their disciplines. On the other hand, while a strong background in a discipline depth is essential for investigating these complex issues, they also require a ‘synthesizing mind’ (Gardner, 2006, p.3). They require investigators who can engage in interdisciplinary translation and synthesis, as part of multidisciplinary teams or individually, in order to develop more complete pictures than would be possible from any one disciplinary perspective (Golding, 2009). One needs to learn how to access, understand, employ, and synthesize the expertise from various disciplines.

The implication is that we must educate for both disciplinary and interdisciplinary expertise. Building interdisciplinary programs is not doing away with disciplines. Interdisciplinary education must supplement disciplinary teaching and learning so students can learn how to respond to challenges that transcend their specific disciplines, work at the interface of confluence of multiple disciplines, and develop research trajectories that do not conform to standard disciplinary paths (Golding, 2009) and learn how to purposefully and reflectively integrate and synthesize the different perspectives from pertinent disciplines in order to advance understanding and solve problems.

Good interdisciplinary research structures not only open up new areas of research, but also provide flexibility and expansion possibilities for traditional disciplines. Research educational systems, which are weak in addressing such interdisciplinary needs, may miss research opportunities, fall behind in research areas, and lose many of their most innovative researchers. Interdisciplinary programs embody the essence of best practices that enhance student learning and prepare students for the complexity of real world issues. However they are highly vulnerable to disciplinary-dominated academic structures (Henry, 2005). In the competition for scarce resources, interdisciplinary programs are often marginalized by some mainstream disciplines, and are often assimilated by them.

How can interdisciplinary education and research flourish while maintaining strong disciplinary depth? Is it even necessary to have a disciplinary depth to conduct interdisciplinary research? How can universities lower or remove barriers to faculty participation in interdisciplinary education and research and create a porous, flexible, less redundant environment that facilitates the flow of ideas, people and resources across disciplinary boundaries? In this short paper, the barriers and the challenges for developing interdisciplinary education and research will be summarized and lessons from some successful attempts and failures will be presented along with some approaches recommended for further discussion.

Barriers to Interdisciplinary Research and Education

A number of authors have identified a variety of factors which can contribute to failure of IDR (Sidolk and Hibbert, 2009; Golde and Gallagher, 1999; National Academies, 2005; Rhoten, 2003; 2004; Feller, 2002, Institute of Medicine, 2002). We do not yet fully understand all the factors that facilitate IDR or all barriers to interdisciplinary scientific research collaboration. Some of the main barriers will be summarized here.

University Structure. Clark (1995) identified over 8,530 disciplines and fields of knowledge, and many more are being created as more and more specialization develops. Most funds flow into and are allocated to the disciplinary units. Faculty are hired into this the unit, and buildings or floors of buildings often physically delineate the departmental division of knowledge.

The current academic structure has led to a lack of historical interdepartmental or crossdisciplinary cooperation, and to turfism and over-sized egos (Golde and Gallagher, 1999). Disciplines have been dividing knowledge into components which served as the basis for organizing academic institutions and put professionals into autonomous fiefdoms (Gass, 1979). This has led to turf wars among colleges and departments over allocations of resources and course credits, and over development of new courses. Often loyalty to the department or college leads to irrational and anti-interdisciplinary decisions.
The academic reward structure is based upon the judgment of disciplinary peers. Professional recognition is derived by maintaining allegiances to departments. Faculty pursuing interdisciplinary research may find it hard to publish and have publications recognized by disciplinary peers (Feller, 2006; Mansilla, et al., 2006). Policies for awarding credit and resources often do not reward individuals or units for establishing crosscutting collaborations. Evaluation, promotion and tenure processes often do not properly evaluate collaborative and interdisciplinary work. The cultures and climate of departments and campuses are often indifferent or even hostile to such activities (Sa, 2008).

The current structure and lack of collaboration between the various academic silos has the following consequences:

1. Students are unable to transfer what they are learning from course to course, or discipline to discipline. (For example students studying a calculus course in a math department cannot effectively use the same concepts in their physics classes, etc.).
2. Faculty lack experience in developing and assessing course offerings that cut across disciplinary boundaries within the traditional STEM communities or those offerings which explore the ethical or socio-economical dimensions of STEM fields.
3. A lack of shared mental models, common language and assumptions and even the desire to collaborate may prove problematic, particularly when participants in a collaborative team have a particularly strong affiliation to their own groups (Jacobs, 2010).

Interdisciplinary research lacks the support structure that makes disciplinary research possible, particularly when such research integrates social sciences, humanities and the STEM areas (Heberlein, 1988). University administrators and STEM professionals often make formal pronouncements about and pay lip service to the need for social science involvement in STEM research. Funding agencies are also emphasizing the need. However these pronouncements are not backed by tangible efforts. (1) Funding decisions and allocations to researchers in the social sciences and humanities are still not adequate. (2) Social sciences and STEM programs are rarely housed in the same building. The physical and institutional organization of universities serves to keep the social sciences and STEM apart. (3) There is lack of knowledge of what the other group is doing. There is little if any exposure to how other disciplines operate. We don’t attend each other’s seminars or conferences or we don’t organize common conferences or seminars.

Disciplinary Jargon- A Communication Barrier. There is a significant body of literature devoted to discussing communication as a barrier to IDR (e.g., Wear, 1999). Articles in different disciplinary journals or textbooks use different notations, or create their own particular vocabularies (jargon) to describe terms which are often not transferable. One often needs to relearn the notations and the jargons in other disciplines to be able to communicate and work effectively on an interdisciplinary research. It is hard to comprehend disciplinary jargon used, for example, in seminars and published articles (Jeffrey, 2003; Massey et al., 2006). Many researchers understand the rigidity of disciplinary structures, but they persist in staying well within them, and are reluctant to move to an interdisciplinary mode of working. Combining the study methods of different disciplines remains a challenge when if there is a willingness to work on interdisciplinary research. Each discipline has its own patterns, meanings, symbols and behaviors, and the thoughts and behaviors of discipline members are influenced by the “knowledge traditions” in which they reside that include categories of thought, common vocabularies and a code of conduct (Frost and Jean, 2003).

Another complaint by discipline-specific researchers is that, in learning another field of knowledge, the time devoted to their own discipline will be compromised. Often there is a feeling that disciplines are watered down to train interdisciplinary scientists and graduates are often considered somehow less competent than focused specialists (Naiman, 1999). Interdisciplinarity has been criticized as ‘difficult to do well’ and ‘by nature superficial’ (e.g., by Kincheloe, 2001).

For IDR to succeed, both dialogue and common ground must be established and maintained between those who have historically sought to distance themselves from disciplines.
beyond their own. However, there can often be a failure to recognize or value contributions from “outside” (Bruce et al., 2004).

Pride in One's Discipline. Nearly all university faculty members are trained in disciplinary programs with specific majors and departmental affiliations; their values and methods are instilled during graduate school. As a consequence, other disciplines might be viewed as less rigorous or important. Disciplinary areas have their own pecking order, and social sciences are seen as easier and less quantitative. Each one considers his/her discipline as the most rigorous and most important. There is even a pecking order within a given discipline. As a result, STEM professionals see themselves as well qualified to do social science research, and social scientists seldom jump the disciplinary boundaries into the STEM areas. Often scientists and engineers denigrate the social sciences and there is a real barrier to equal partnership in the research enterprise between social scientists and STEM professionals (Sperber, 2003).

Personal Barriers. Personality traits which appear to matter in interdisciplinary work include willingness to accept alternative methodologies, the ability to learn rapidly, good leadership skills and an interest in real world issues that have long term impacts (Jacobs, 2010).

Amabilie et al. (2001) defined three characteristics which may impact the success of IDR. These are (1) collaborative skills, (2) project relevant skills, and (3) attitude and motivation. Additional important elements for collaboration include trust (absence of hidden agenda); mutual respect of other members; appreciation, understanding, and respect for other disciplines; and the ability and the willingness to develop a common language.

Teamwork also requires trust in another's skills and expertise and appreciation of the other discipline. Methods and criteria for evaluation are different for different disciplines. It may be difficult for interdisciplinary team members to evaluate each other's performance (Anbar, 1986). Reward systems and practices regarding authorship on refereed publications differ among disciplines and even in different branches within a given discipline (King et al., 1997; Moore, 1989).

In building an interdisciplinary team, there must be clarity regarding roles, expectations, and authority. Clearly articulated protocols in data and resource sharing and leadership in projects is important for success (Bruhn, 1995; Grant et al., 1998). Policies should be mutually developed and agreed on and be acceptable to a majority of the members to enhance the team members’ personal and professional goals (McGuire, 1999). Success in interdisciplinary efforts requires expertise in one’s discipline, good interpersonal skills, a strong leader, commitment, flexibility and willingness to work.

Lessons from Organizational Strategies to Foster Interdisciplinary Research
Interdisciplinary research and education is promoted by a number of universities through the establishment of interdepartmental or interdisciplinary degree programs (IDPs) or organized research units (centers and institutes). Several different processes to create and fund organized research units (ORUs) have appeared. Some are created as strategic administrative decisions and are provided seed funding (e.g., Ohio State, NCSU, Rutgers, UC Berkeley, UCONN, UVA, Vanderbilt, Virginia Tech., etc., to mention a few). Others are faculty initiated efforts which gain administrative support and some are created as a result of large external funding to groups organized as interdisciplinary groups (NSF-STC’s IRCs, NSF-CREST Centers, NSF-IGERT, NOAA CSCs, NOAA CIs and other programs funded through NIH, DOE, DoD, NASA, USDA, EPA, Homeland Security, etc.). In almost all cases these ORUs or IDPs co-exist with disciplinary departments that retain exclusive control over academic life through hiring and tenure decisions, course approval and development, degree requirements, merit evaluation, etc., in general, keeping the barriers that have been identified as hindering interdisciplinary efforts. The National Academies’ report contends that few universities have implemented systematic reforms to lower institutional barriers (National Academies, 2005). A study that examined the interdisciplinary centers of major universities reported that “Universities are failing to walk the walk”- or even to comprehend fully what doing so would entail.” Most interdisciplinary efforts are merely
reconfigurations of old studies or traditional modes of work patched together under a new label (Rhoten, 2004). Despite the rhetoric and apparent enthusiasm for crossing disciplines, interdisciplinary programs (IDPs and ORUs) remain relatively difficult to initiate, fund and sustain. The lessons and examples cited are by no means an exhaustive list. It is intended to provide some representative examples.

NCA&T developed three interdisciplinary graduate degree programs based on interdepartmental collaborations; these graduate programs were placed under the graduate dean. The programs only have program directors and administrative support and courses and student supervision is done by faculty from all over the university. The programs were provided new faculty positions, to be hired as joint appointments, by disciplinary units where tenure decisions are made with little or no input from the interdisciplinary program. The interdisciplinary program that initiated the hiring has no say in the decision. There has always been a conflict on course load assignments as departments didn’t value the participation of their faculty and others in the interdisciplinary effort. Another problem with joint appointments is that the department expects the interdisciplinary hires to carry a full load of department activities. Within a few years the interdisciplinary degree programs were engulfed by colleges and were turned into academic departments with an interdisciplinary label and no faculty to teach their core courses despite their increased enrollment and demand.

The NOAA Interdisciplinary Scientific Environmental Technology Cooperative Science Center (ISETCSC) at North Carolina A&T was a multi-institution center that brought together thirty-one scientists and engineers in eleven academic departments to conduct research on development of technologies that support the prediction and understanding of climate and environmental change. The center has led establishment of new degree programs that include a Bachelor of Science program in atmospheric sciences and meteorology and a PhD concentration in atmospheric sciences within the Department of Energy and Environmental Systems (EES) which was developed as an interdisciplinary graduate program. The center developed relevant interdisciplinary MS thesis projects and undergraduate senior projects for students supported by the grant in several STEM departments (physics, mathematics, chemistry, computer science, electrical engineering and chemical engineering). It also provided opportunities to develop interdisciplinary interactions and collaborations among faculty and students in all participating departments, including joint advising of graduate students and common seminars.

However centers like ISETCSC were created because of external funding and not because it was part of the institution’s strategic plan; hence, sustaining the educational and research programs when external funding ceases is a major challenge. The participating departments are no longer motivated to work collaboratively. Faculty hired to support the degree programs created as a result of the funded center have joint appointments in the two programs that house the atmospheric sciences programs. The tension that resulted from narrow departmental interests and a lack of decisive action by university administrators has hindered the success and growth of these programs.

Conclusions

Interdisciplinary research must become a vested interest of all universities. At times, senior administrators may use the term, interdisciplinarity, without the benefit of a deep understanding of what interdisciplinary studies are all about. Meaningful interdisciplinary outputs will not emerge spontaneously from physical or intellectual proximity (Jeffrey, 2003). Organizational arrangements can also either support or obstruct IDR; therefore, changes may need to be made at the institutional level to intentionally remove the barriers, and the inertia in order facilitate IDR.

The 2008 IGERT program directors’ workshop made several recommendations to develop transformative interdisciplinary research and graduate education including (1) the establishment of new organizational models around open-ended scientific discovery and

http://scholarworks.wmich.edu/ijad
addressing social challenges, (2) the development of measures of success and milestones, (3) the development of more dynamic and flexible structures with some fluidity of movement and the elimination of hierarchical structures, (4) the basing of interdisciplinary graduate education in disciplinary programs, and (5) the extension interdisciplinary research and education into undergraduate education.

The most prevalent budgeting model of universities is a decentralized model in which the lion’s share of resources flows to schools, departments, and other units. *Deans, department chairs and other administrators are rewarded for strengthening their own departments, but not for building links to others.* This reward structure only increases the turf war to the point that often college deans and department chairs brag about how they have successfully negotiated to increase their budget and holdings, and forget they are working for the university and expect people within their units to have loyalty first to their units.

Academic departments create an environment within which training and research occur. Discipline-oriented departments constitute a functional authority structure in charge of teaching, faculty recruitment, advancement, and promotion—as well as degree programs and courses. Funding processes reinforce the departmental structure. Departmental organization changes relatively slowly and there a tremendous inertia to change. Incentives may help bring some change, but not enough to meet the urgent need of interdisciplinary research and training needed to address pressing social, political, economic challenges society faces. The priority given to contributions in fields that correspond to departmental structures can inhibit interdisciplinary approaches. Institutional policies regarding allocation of laboratory space, hiring, and promotion policies vary considerably, but the department chair generally has a major influence. Often, the same barriers that hold back IDR hold back the natural evolution of the disciplines themselves.

Even though a number of authors have recognized universities’ administrative structure as a major barrier for interdisciplinary research and education, the solutions offered and recommended do not go far enough to address the issue. The recommended changes fall short of enhancing full-fledged interdisciplinarity. The recommendations made so far only try to modify and tweak the current academic structure but not in a fundamental way. They try to improve communication and the structures for providing rewards, funding, incentives and course offerings. However, this leaves the very problem (structure) intact. Creation of interdisciplinary centers, institutes and degree programs which co-exist with the existing disciplinary structure does not change who still controls the funding, and the processes for tenure and promotion.

This is not advocating for anarchy in higher education. There is still a need to develop a new form of structure which is significantly different from what we have now. This new structure will simultaneously allow disciplines to flourish and grow with unprecedented innovation brought about by open communication and collaboration with other disciplines. This new structure will remove redundancy and duplication and allow and help students move and transfer skills and knowledge learned in one discipline to other disciplines, and also allow them greater flexibility and promote interaction for innovative new interdisciplinary products.

It may not be easy and may seem impractical to do away with academic departments and colleges created and in existence for centuries. But there is an opportunity for new and emerging universities, especially those in developing countries to be innovative and radical in the way they establish their institutions. For example in the last 10 years over 20 new universities have been established in Ethiopia. All of them have just copied the traditional structures and created academic departments and colleges. They also aspire to develop interdisciplinary programs while strengthening departments. But such young and emerging institutions have a real opportunity to be innovative and create a transformative structure that would change higher education in a fundamental way. This opportunity is being missed by all of them since they are duplicating a failed system.
References
Jacobs, N., & Amos, M. (2010). Removing Barriers to Interdisciplinary Research. DOI: abs/1012.4170


