Do different coups have different implications for investment?

Some intuitions and a test with a new dataset

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To what extent do different coups d'etat have different implications for investment and growth?[1] The existing literature is largely silent on this point. Although a large body of work has been devoted to categorizing coups, and 'political instability' plays a prominent role in many development models, these two bodies of work remain remarkably segregated. Attempts to differentiate between coups have tended to be descriptive and regionally-focused, while large-n quantitative work has typically treated coups as homogenous events. Thus, we lack a systematic, cross-national exploration of the implications of coup-attributes on economic variables of interest.

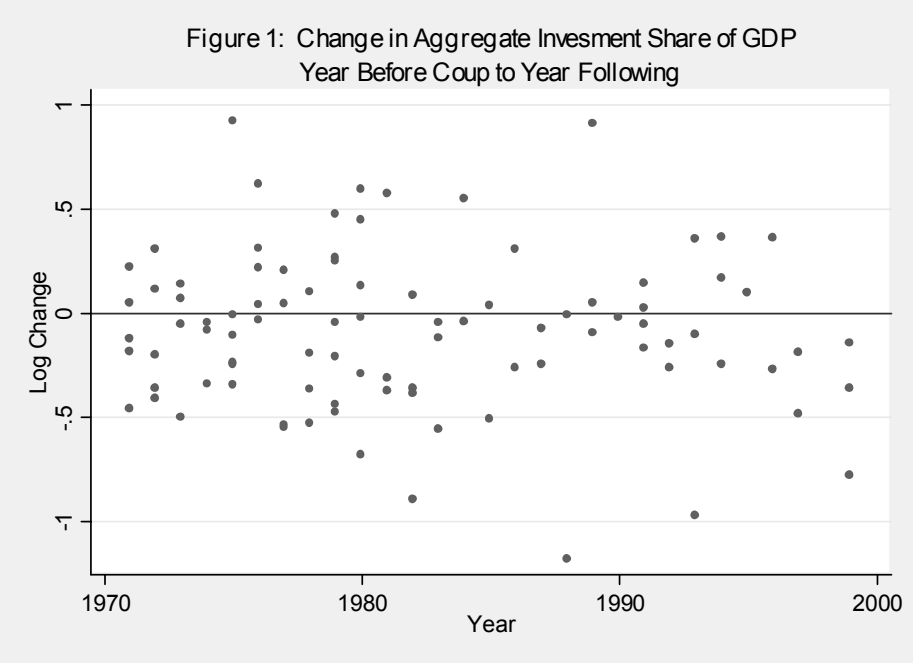
This gap in the literature is particularly interesting in light of the apparent importance of region to both of these literatures. Africa and Latin America are each popularly associated with coups of a particular type (chaotic 'breakthrough' coups on the one hand, reactionary 'corrective' coups on the other), while the recurring significance of the 'Africa dummy' has inspired substantial debate in development economics. Indeed, it seems possible that the *characteristics* (rather than simply the number) of Africa's coups might account for part of the reason that the continent appears to be 'just different.'

There is good reason to believe that coups do not have uniform economic implications. For instance, widespread disagreement exists on the sign of the relationship between political instability and investment, with some studies showing that coups and revolutions have a negative effect on aggregate investment, others finding no statistically-significant association – and still others demonstrating a positive, causal relationship.

Interestingly, plotting the difference between aggregate investment levels in the year before a coup and the year after reveals a remarkable scatter (figure 1).[2]

[1] For the purposes of this paper I have used a narrow definition of a *coup d'etat*, limiting my observations to events in which a forced or extra-constitutional action deposes the top leadership of a country and replaces it with members of the group behind the transfer (or with individuals explicitly chosen and sanctioned by this group). I exclude cases in which a leader is killed or forced to resign if he is succeeded by his pre-ordained (and/or constitutionally-mandated) successor - so long as that successor does not appear to have been involved in the removal action. I also exclude changes which are the result of a protracted inter-state or civil war, and 'self coups' in which the executive himself abrogates the constitution but is not removed from power at any point. Some – but not all – of the events elsewhere categorized as 'revolutions' qualify as coups under this definition.

[2] Data from Penn World Tables, Mark 6.1. Aggregate investment is investment share of real GDP (Laspeyres). Coup-year data are excluded since the data are annual and the coups occur throughout the year.



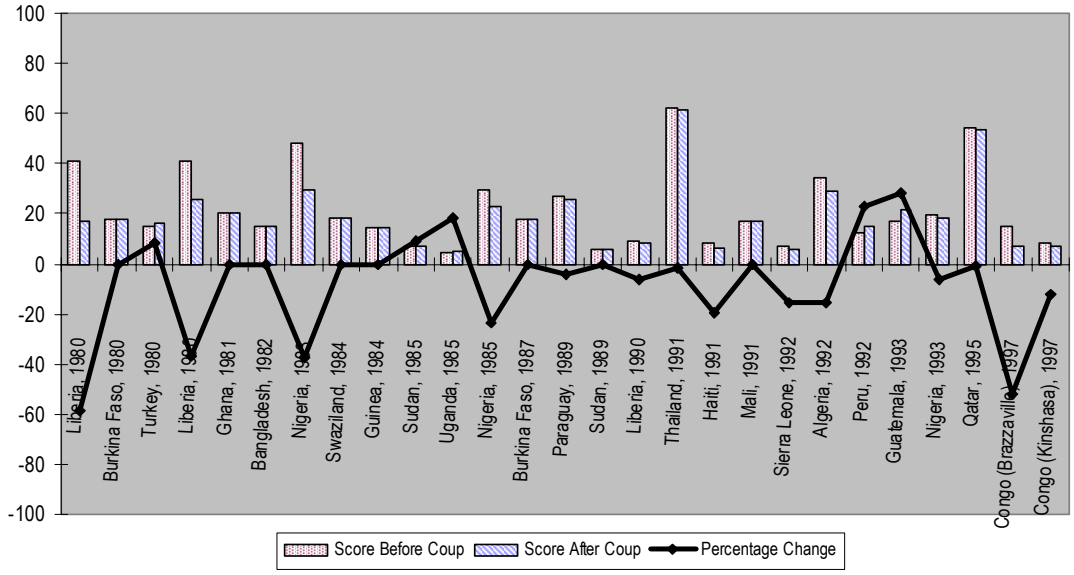
This scattered distribution holds even if we restrict the observations by region (African /non-African), or per capita GDP (above/below the mean), and is not limited to data on aggregate investment. Among coups for which we have data, slightly more than half were followed by an increase in private capital flows in the following year, with similar distributions for changes in the private investment share of GDP and fixed capital formation.[3]

Nor does this variation appear to be simply an artifact of the data. A survey of institutional investors also reveals variation in their assessment of risk in the wake of different coups (Figure 2).[4] While most of the coups in this sample were associated with a decrease in score (indicating a riskier environment), in a number of cases the first score following a coup was revised *upward* from the previous score, and several countries saw no change before and after a coup.

[3] Data from World Bank Development Indicators and

[4]Based on September ratings from Institutional Investors Magazine (1979-1998), reported by the World Bank in its *Database on Foreign Direct Investment*, prepared by Maura Liberatori.

Figure 2: Institutional Investors' Assessment of Investment Risk Before and After Coups
Risk Scores From Institutional Investors Magazine, 1980-1997
(0-100, 100 indicates least risk)



How can we account for this variation? I argue that there are particular differences among coups which are currently ignored by the investment literature – but which are likely to have different implications for investment. Intuitively, dissimilarities in (1) the amount of chaos and violence associated with the coup, and (2) the strength and ostensible ideological orientation of the new government seem likely to induce different responses from investors. Thus, bloodless coups which install strong, investment-friendly regimes ought to have systematically different effects on investment than do coups associated with violence and chaos – and/or those which empower governments that favor nationalization and land reform.

The remainder of this paper is organized into four main parts. The first provides a brief review of the extant literature regarding the effects of political instability on investment. The second outlines my intuitions about the ways in which particular coup-characteristics are likely to affect investment, and gives examples of the substantial variation along these dimensions which we have seen coups during the modern period. The third part is a brief case study of the effects of Uganda's 1971 coup on a number of economic indicators associated with investment. In the fourth part I report the results of an initial series of quantitative tests of my hypotheses,

using an original dataset on coup attributes. The conclusion summarizes and suggests paths for additional research.

2. Background

The main theoretical assumption made by the literature linking instability and investment is that in the face of uncertainty actors defer making investments for which they cannot completely recover their sunk costs (Dixit and Pindyck, 1994).[6] As a result, ambiguity over a government's policy preferences - or its ability to implement them – may create a "tax on investment" (Rodrick, 1991; Aizenman, 1993).

In theory any changes in the ruling government could depress investment in this manner.[7] Indeed, the possibility that an elected government may adopt policies adverse to capital accumulation has demonstrably negative effects on investment (Alesina and Perrotti, 1989), and international investors appear to favor democracies which have created independent central banks to bind their hands with regard to fiscal policies (Simmons 1994).

Extra-constitutional changes, however, appear to create a particularly acute set of problems. Events such as coups, riots, revolts, revolutions, and assassinations are remarkable not only for their unpredictable timing, but also for the extent to which they are associated with violence, unknown and inexperienced leaders, and an increased chance that another disruptive event will occur. Indeed, it seems quite straightforward that this type of political instability should create extreme policy uncertainty and depress investment.

Interestingly, empirical investigations of this relationship between political instability and investment and growth have produced quite mixed results. Although a number of studies report the predicted inverse relationship between political instability and *aggregate investment* (Svensson, 1998; Aizenman, 1999; Guillaumont, 1999; Berthelemy, 2002), *private investment* (Feng, 2004), and *growth* (Barro, 1991; Fosu, 2002; Alesina et al., 1996; Easterly and Levine,

[6] This type of irreversible investment should be distinguished from perfectly reversible investments, which are predicted to behave quite differently under conditions of uncertainty. Caballero (1991) gives a survey of the literature on both types. This paper will follow the vast majority of the literature in considering only irreversible investment.

[7] Carmignani (2003) provides an excellent survey of the literature regarding the effects of instability on economic outcomes where there is no change of regime.

1997; Gyimah-Brempong and Traynor 1999), another group of authors has found that political instability has *no* significant effect on these variables (Londregan and Poole, 1990; Levine and Renelt, 1992; Easterly and Rebelo, 1993; Keefer and Knack, 1995). Recently, Campos and Nugent (2002) have argued that a more appropriate lagged model shows that instability actually causes *increased* investment in subsequent periods. This finding echoes Fosu's (2002) finding that successful coups appear to be positively related to growth at low investment levels.

The idea that political instability might be positively related to investment does have some theoretical support. Fosu observes that investors may actually welcome coups in cases where the existing government is incompetent or hostile to investment (1992, 1999), while Robinson and Acemoglu (1996) make a similar argument that these types of changes in government may result in long-run policy improvements. Campos and Nugent also suggest that their finding may be explained by the destruction of capital stock during these types of events (following Herschleifer, 1987), or by increased precautionary savings.

Notably, rather than considering them on their own, most of these studies fold coups into a broad measure of 'socio-political instability.' Many authors create an index of instability including – variously - coups, assassinations, revolutions, riots, government crises, constitutional changes and civil liberties (e.g. Berthelemy, 2002; Aizenman, 1999; Guillaumont, 1999; Gyimah-Brempong, 1999). Typically such an index will represent either a simple accounting of these events, or the probabilistic calculation of the chance that a country will experience such an event at any point in the period.

Even studies which focus on particular types of events have reached little consensus. Brunetti's (1998) sensitivity analysis on frequently-used measures of revolutions, coups, mass demonstrations, and cabinet changes finds that only the first two are robustly related (and negatively so) to investment. Serven (1996), on the other hand, finds strong inverse relationships between investment and civil liberties, revolutions, cabinet changes, and ethnolinguistic fractionalization – but no relationship with coups, demonstrations, riots, or assassinations.

Fosu's work (2002) provides one of the first attempts to differentiate among types of coup events. Following McGowan and Johnson (1984), he divides coup-events into 'successful coups,' 'abortive coups,' and 'coup plots,' and finds that unsuccessful coups had a more significant and consistently negative relationship with growth than did successful coups and coup

plots, which were positively related to growth where investment was low. Properly-specified growth-models, he argues (2001), must incorporate all three of these 'types' of coup-events.

Recently scholars of growth and investment have begun to incorporate more explicitly political variables into their economic models. Nkurunziza and Bates (2003) examine the effects of stability (captured by regime duration) on growth, including in their model scores from the *Polity* index as a proxy for the degree of democracy (or autocracy) in the country. While they find that each of these variables has straightforwardly positive effects on its own, the interaction between the two indicates that long-tenured autocrats may be more adept at promoting growth than similarly-tenured democratic governments. Svensson (1998) and Feng (2004) have also included index measures of institutional quality, political freedom, and the rule of law in their work.

Nonetheless, in spite of this trend toward a greater degree of political sophistication, I have not found any economic models which actually *differentiate among the political attributes of successful coups.* I argue that the surprising variation shown in figure 1 indicates that this relationship ought to be explored further – particularly since coups in the modern period have varied substantially along political dimensions likely to impact investment, including the strength and ideological orientation of the new government, foreign support for the new leadership, and the extent to which the coup is accompanied by bloodshed, chaos, and lawlessness. In the next section I give examples of coups which have differed in this manner, and outline ways in which investors might respond to this variation.

3. Theory and Examples

The extant literature assumes that coups necessarily result in extreme policy uncertainty, violence, and lawlessness – but is this always the case? There are, of course, some coups which could hardly be anything *but* investment-inhibiting. Liberia's 1980 coup is a striking example. During the bloody coup President Tolbert (a staunch capitalist and a western ally) was killed, his son beheaded, and 27 members of the government summarily executed. Observers described "pandemonium" in the wake of the coup, with widespread gunfire, violence and looting reported in the capital, and at least two European women reported to have been raped. Unwilling to rely on top-ranking military officers for support, Doe sacked most of the officers in the military and

established a ruling council comprised of officers ranked no higher than major. In the days following the coup the international press reported that Samuel Doe was "a complete unknown" - even to well-informed Liberians - with questionable education and no political experience. Even his official biography was coy about his political orientation, listing him as "not a socialist, nor particularly a capitalist. But rather…committed to the establishment of equal opportunities for all" – except, that is, for the country's minority Lebanese traders, whom he threatened with stock seizures and expulsion.[8]

Compare this coup to the Thai coup of 1971. The fourth bloodless military coup in twenty years, during this event the top brass of the army 'deposed' the premier (himself a general), abrogated the constitution, and then created a new military executive council with the deposed leader at its head. After the coup the *Wall Street Journal* carried the headline: "In Thailand, a Coup Changes Very Little But Costs Very Little," and opined that "This coup was particularly nonviolent and undramatic because the generals who fomented it were already in power to begin with."[9]

Even beyond these extreme cases coups vary substantially in a number of attributes of interest. I argue that coups vary significantly along four dimensions likely to have implications for investment and growth: (1) the extent to which the coup is associated with chaos, violence and lawlessness, (2) the new government's indicated policy preferences and the extent to which it can implement those preferences, (3) foreign support for the coup, and (4) whether or not the coup-leaders installed a civilian to lead the country.

3.1 Chaos, violence, and destruction

The amount of bloodshed associated with coups provides perhaps the most straightforward means of differentiating between these events, since widespread or high-profile violence (such as the killing of government officials) is one of a coup's most noticeable – and easily interpreted - outcomes. Indeed, in light of the robust inverse relationship between war and investment (Serven 1996) there is good reason to believe that extremely violent seizures of power ought to depress investment in their wake.

[8] [AP cite]
[9] [WSJ cite]

Coups – and particularly African coups - are typically assumed to be violent and chaotic, and a number of these events do fit this stereotype. The 1985 Ugandan coup was followed by an "orgy" of looting during which "shops were wrecked and drunken soldiers wandered the streets firing into the air."[10] Chaos also followed Afghanistan's 1978 coup, with bodies "lying around" after "fierce" fighting. As many as 80 people died in the violence, including the deposed leader and several of his cabinet.[11]

Not all coups, however, are associated with this type of destruction – and some appear to create hardly a ripple in daily life. After the 1981 coup in the Central African Republic the Associated Press observed that it had been "the most low-key coup in the history of independent Africa," noting that French residents of the country were "surprised" to learn of the coup, and that there had been "no reaction at all" among the population of the capital.[12] After Guinea's 1984 coup an American diplomat marveled that "it's incredible…Things look very much as normal."[13] Murtala Muhammed's coup in Nigeria was widely hailed for its "maturity," with local press noting that it gave the country "cause to be proud,"[14] and London-based *West Africa* arguing that "Coups need cause no more instability than, under a parliamentary system, comes from a change of government after a general election."[15] The weekly went on to report that the London market's modest reaction to news of the coup could be attributed to "the City's belief in the good sense and sophistication of Nigeria."

3.2 Ideology, Strength, and Credibility

The economic consequences of ideological changes have been widely explored in the context of stable democracies. A number of studies have used data from advanced industrialized democracies to demonstrate that the right- or left-leaning ideology of the ruling party - and shifts between parties of different orientations - have predictable effects on growth, unemployment, and inflation (Alesina and Rosenthal, 1995; Alesina et al., 1997; Boix, 1997).

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[10] Drum Magazine, reprinted in (Seftel 1994, p. 278).
[11] NYT April 28, 1978
[12] AP, September 1, 1981.
[13] NYT April 3, 1984.
[14] Osaghae, 1998, Quoting the New Nigerian, August 1, 1975
[15] West Africa, 1975: 876-877

At the simplest level, if investors differentiate between the ideological orientations of democratically-elected governments, it does not seem inconceivable that they would similarly distinguish among coup-installed governments. Indeed, one can imagine that investors would respond quite differently to a seizure if the new government espoused the importance of privatization and cooperation with the IMF (Ghana, 1966) – rather than terming the coup "a victory over international imperialism and its allies," and an opportunity to implement widespread land reform (Burkina Faso 1983).[16]

In this latter case the coup did not create *uncertainty* about the government's preferences as much as a reasonable expectation that its policies would be inimical to private investment. Where the government immediately makes these sorts of promises one can think of few cases in which rational investors would not be better-served by deferring investment decisions - indeed under these circumstances it seems reasonable for them to head for the hills. Although less dire, we should also see depressed investment if the coup-empowered government refuses to indicate what its preferences are, or makes obtuse (or conflicting) statements, since this leaves open the possibility that it will eventually implement unfavorable policies.

Even if a government takes pains to indicate that it is investment-friendly, that may not be enough to buttress investment in the wake of a coup. As Rodrick (1991) notes, uncertainty's 'tax' on investment will be ameliorated only if the government's preferred policies are investment-promoting, *and* the government is powerful enough to implement its policy preferences. In democracies this question of efficacy may be captured with measures of legislative and coalitional strength. In the wake of a coup, however, it makes sense to focus on whether the new government controls (or is, to a real degree, controlled *by*) a cohesive military. In addition to being a simple proxy for the new government's ability to implement its goals, support from a cohesive military with a strong ideological bias may introduce the threat of a 'veto' in case the new leader strays from his stated plans – lending credibility to the government's claims about its preferences. Finally, if a coup-leader and his backers genuinely possess a monopoly on violence they may not only be able to decrease the chance of a counter-coup, but also of widespread chaos and violence in the wake of the coup.

[16] (Associated Press, August 5, 1983)

Military support for coup-installed governments has varied dramatically in the modern period. In Togo (1963) the army accepted Grunitzsky as a compromise and never gave him more than tepid support. Bolivia's 1970 coup was marked by military factionalism, as a left-leaning air force jockeyed for power with a right-leaning army. In comparison, Argentina's 1976 coup had extraordinarily strong support from the country's armed forces, and Thailand's 1951 coup was backed by the entire military apparatus – a fact that was repeatedly emphasized at the news conference announcing the coup, in which leaders of the army, navy, air force, and police all participated.

3.3. Foreign Involvement

Explicit military support from a foreign power may be an even more reliable indicator of the new government's orientation and the credibility of its promises. This was particularly the case during the Cold War, when the superpowers had strong ideological alignments and a keen interest in the orientation of developing states. Foreign support for the coup – and, crucially, the threat that this foreign country might remove (or refuse to assist) the coup-instated government if it fell out of favor – may also create this type of 'veto' threat.

It seems logical that support from Western powers would buttress investor confidence in the wake of a coup, and the US and France each explicitly intervened in coups on several occasions. In addition to providing covert military assistance for several coups in Latin America, the US has used its own troops to conduct coups (the 1989 removal of Panama's Manuel Noriega), and made clear threats to intervene in support of its preferred government, as it did when it stationed battleships just off the coast of the Dominican Republic as a warning against a counter-coup. France has intervened in a number of African coups, using French troops to depose a leader (Comoros 1995, Gabon 1964), to provide assistance to a coup (CAR 1979), or to support a coup-installed government (Chad 1982). Notably, France has also refused requests to protect the ruling government - most famously in Congo (Brazzaville) in 1963, and Chad in 1990.

3.4. Civilian Leadership

Finally, although the immediate installation of a civilian may have an effect on investment, the direction of this effect is ambiguous. Investors may well prefer civilian leaders in theory – particularly if the civilian is well-respected or has previous experience in government, as has been the case for many civilians appointed by coup-leaders. In practice, however, civilians are also unlikely to command the same type of support from the military as their counterparts in uniform. As a result, new government headed by a civilian may not only be less able to implement its preferences, but also to prevent chaos in the wake of the coup and thwart attempts at counter-coups.

3.3 Case Study: Uganda's 1971 coup

If there is, in fact, such a thing as an 'investment friendly coup,' what might it look like on the ground? Though it can hardly be held up as a typical case, Uganda's schizophrenic economic policies between 1969 and 1973 provide an excellent opportunity to observe the short-term effects of coup-related policy shifts on a number of measures of investment – particularly since the policy shifts correspond roughly to calendar years, allowing us to use annual data. Indeed, all of the detailed economic metrics available for this period show a marked increase in private investment activity in the months following the coup, coincident with Idi Amin's strong overtures to both domestic and international investors. These figures slumped dramatically a few months later, in 1972, as Amin reversed his course and began the massive expropriations for which he is notorious.

In the year before the coup the atmosphere in the country had become increasingly hostile to private investment. Toward the end of 1969 Milton Obote published his Common Man's Charter, instructing the populace that "no citizen or person in private enterprise should entertain the idea that the Government cannot, whenever it is desirable in the interests of the people, nationalize any or all privately-owned enterprises…at any time."[17] On May 1st 1970 Obote announced that he would force all of the country's major private enterprises to cede a 60 percent

[17] Obote 1969, p. 11

controlling interest to the government, and by August local officials had begun to seize the businesses of non-citizen Asian traders in a number of areas.

The announcement of Idi Amin's January 25th coup was followed by widespread dancing in the streets. Although the coup was not actually bloodless (it may have resulted in as many as 20 deaths after 12 hours of fighting in Kampala), and was only supported by a faction of the military, in the wake of the takeover neither of these facts was widely reported by the domestic media. The country's main newspaper focused on the ecstatic welcome which greeted Amin's forces, as well as on the public pledges of support the new government received from all quarters (including several from high-ranking military officers and one from the chief of police).

A particularly interesting aspect of this coup is the evolution of Amin's economic policies. Although the Minister of Finance did make a few promising statements in the Ugandan and British press, in the first months after the coup the new regime largely refused to commit itself to an economic ideology. Indeed, the limited monthly data available do appear to show a decrease in economic activity immediately after the coup. February, the first full month after the seizure, saw the tonnage of goods imported by rail drop to its lowest in 16 months, and during that month there was only a single application lodged for an industrial license to build a factory – compared to a median application rate of more than 5 per month during the rest of 1971 (see Uganda Appendix, figs 1 & 2). Two weeks after the coup the Uganda Argus reported that "no fundamental change of policy over Africanization is looked for, any more than Britain expects the nationalization programme to be undone or the monarchies restored."[18]

Three months after the coup, however, Amin broke with Obote's policies in a much more substantial way than most observers seem to have expected. In a sweeping May Day announcement he noted that private investment was not only "of vital importance" to the country, but that "even if it were considered desirable to do away with private enterprise, the fact is that the Government does not presently have the financial and manpower resources to replace private activity."[19] More surprisingly, he reduced the government's recently-seized stake in private enterprise to 49 percent, and went as far as to encourage private companies to apply to revise the agreements which they had negotiated with Obote's government. Later the new

[18] (Argus February 9, 1971).
[19] (Amin 1972, p. 3).

government announced a budget which included several tax-breaks for the middle and upper classes in a move designed to encourage domestic investment.

Interestingly, it appears that investors in the country were extremely receptive to these overtures, with a number of economic indicators showing marked increases for the 1971 calendar year. Private capital inflows increased more than 300% between 1970 and 1971 (see Uganda appendix table 1), after a massive increase in outflows and a precipitous decrease in inflows in 1969 and 1970. After the initial drop in February the tonnage of goods imported by rail increased steadily, reaching unprecedented levels in August, 1971 (see Uganda appendix fig 1). Indeed, the overall volume of imports – and particularly of imports from the UK and India - increased sharply as merchants re-stocked their shops (see Uganda appendix fig 3).

Commercial construction also increased in 1971. After February's low the number of applications filed for licenses to build new factories surged in the months between June and October, with five times the number of applications filed as had been filed during the same five months of 1970 (Figure 2). The number of private buildings completed for non-residential uses also increased in 1971, with the number of buildings built increasing by 42%, the associated floor space increasing by 52%, and the value of new construction increasing by 44% (Figure 4).

Vehicle records similarly indicate an increase in 1971 – or at least an increase in the number of vehicles reported to the government. During the year of the coup Ugandans registered more private cars than they had since 1967, and more utility vehicles (including pick-ups), motorcycles, and trailers than they had in any previous year (Figure 5). Only truck registrations declined, as they had also done in 1970.

This honeymoon did not last, of course. By the end of 1971 Amin had begun to adopt a much more radical, unpredictable rhetoric. In August 1972 he expelled and expropriated the property of nearly 50,000 Asians, followed by the seizure of British-held businesses in December. In the latter half of 1972 he also retracted his promised tax cuts, levied new taxes, instituted domestic price controls, and placed restrictions on exports. Hardly surprisingly – particularly in light of the loss of the country's merchant class – the economic figures for 1972 show a dramatic decline from their 1971 levels, and the monthly data show a tremendous decrease in the first full month after the expulsions.

4. Cross-national test

In order to test my hypotheses cross-nationally I have constructed a new dataset which includes detailed coding for the attributes of coups, 1950-2000. The most notable feature of this dataset is that coups – rather than country-years – are the units of analysis, allowing me to code these events on a number of characteristics of interest.[20] Each coup is currently coded for 17 variables, including the number of people killed, attributes of the deposed leader and coup leader - name, age, rank (if military), and stated ideological orientation (if any) - as well as information about foreign involvement and the head of state empowered by the coup (if different from the coup leader).

The full dataset currently includes 222 coups, though 28 occur in the same year and country as at least one other coup. Because the economic data in this study are annual, for the purposes of this paper I have included only the last coup in the calendar year, and all values for the observation reflect this latest coup (descriptive statistics in the appendix).

4.1 Coup attributes

To capture variations in the levels of violence associated with coups I have coded the number of coup-related deaths reported in the international press after each event.[21] For the purposes of this paper I use a dichotomous variable which differentiates between truly bloodless coups and those with any fatalities:

- *BLOODLESS*, a dichotomous variable that takes a value of 1 if the coup was reported to have been 'bloodless,' (0 for coups with one or more reported casualties).

Using contemporary reports from the international press I have divided coup-installed regimes into six general types according to their professed ideological leaning and apparent military support. On one end of the spectrum are governments which appeared to be supported by the country's entire military, and – in the first six months of their tenure - made announcements about protecting property rights, attracting investors, and/or explicitly anti-communist or pro-American statements. Radical leftist regimes strongly supported by the

[20] Although not exactly the same, this format is quite close to the one employed for interstate, intrastate, and civil wars by the Correlates of War project (op cit.)

[21] Main sources are the New York Times, Wall Street Journal, AP, London Times, and AFP. Uganda's example indicates that there may be a substantial difference in reporting between the local and international media – though the local press is not always either more reliable or more likely to report problems in the wake of a coup.

military lie on the other extreme, with most coup-installed governments falling somewhere in between these extremes. These six types are all coded using dichotomous variables:[22]

- *STRGT* takes a value of 1 if a coup-installed government backed by a unified top military brass makes clear overtures to private investors.
- *STLFT* takes a value of 1 if a coup-installed government backed by a unified top military brass makes statements in favor of nationalization, land-reform, or communism.
- *STINDET* takes a value of 1 if a coup-installed government backed by a unified top military brass failed to make statements about economic policy, hedged, or made a series of vague announcements.
- *WKRGT* takes a value of 1 if a coup-installed government without clear army support (supported by a fragment of the military or led by a low-ranking soldier) makes clear overtures to private investors.
- *WKLFT* takes a value of 1 if a coup-installed government without clear army support (supported by a fragment of the military or led by a low-ranking soldier) makes statements in favor of nationalization, land-reform, or communism
- *WEAKINDET* takes a value of 1 if a coup-installed government without clear army support (supported by a fragment of the military or led by a low-ranking soldier) fails to make clear statements about its economic policy preferences. WEAKINDET is excluded from the models to avoid over-specification.

In order to capture the *ideal* investor-friendly coup (bloodless, strong, and investment-friendly), I have used an interaction term:

- *STRBL*, a dichotomous variable which is the interaction between STRGT and BLOODLESS.

Roughly speaking I expect to see these STRBL coups garner the most positive response from private investors, with STLFT coups sparking the most substantial investor flight. I expect WKRGT and STINDET coups to depress investment in just the way that the current theory predicts, as investors cautiously assess an uncertain situation. Although I expect STLFT coups to create the sharpest decreases in investment levels, WKLFT coups are also likely to cause investor flight – particularly if it appears that the government is catering to the masses but may be too weak to keep control in case of massive public action.

[22] I have shied away from using two interacted variables on the logic that a strong, right-leaning coup is more than simply the sum of its parts.

I also used contemporary accounts in the international media to code for foreign involvement in the coup and the quick installation of a civilian:

- *RTFORINVOLV*, a dichotomous variable which takes a value of 1 if a major capitalist power (in practice, either the US or France) provided direct military assistance to the coup.

- *ELCIV*, a dichotomous variable which takes a value of 1 if the coup was followed (within the year) by the installation of a civilian through appointment or democratic election.[23]

4.2 Dependent variable

For the purposes of this paper I will use changes in the aggregate investment share of GDP as my dependent variable:

- *LOGKICHANGE,* the log-rate change in aggregate investment levels (%GDP, constant 1995 dollars) from the year before the coup to the year following.[24]

Aggregate investment is the variable used most frequently in the literature, and includes data from the 1960s for most countries and the 1950s for several. It is worth noting, however, that measures of aggregate investment include both private and government investment, muddying the conclusions we can draw about the behavior of private investors.

In a number of cases changes in aggregate investment may well be driven by these government figures. Ghana's 1966 coup is one such case. Although the aggregate investment share of GDP fell by nearly half after the coup, it seems plausible that this drop is not capturing an exodus of private investors, but rather the contrast between Nkrumah's profligate spending and the austerity measures which the new government immediately enacted.

In spite of these shortcomings, this aggregate investment data does not create the some of the problems introduced by more finely disaggregated data on investment and capital flows. Most of the detailed investment-related data does not extend further back than 1970 (including the best data on private investment share of GDP (Everhart and Sumlinski 2001), and the World Bank Development Indicators' figures on private capital flows and fixed investment).

[23] Although I have included it in this paper for illustration, this variable needs to be partially recoded, and should be taken as quite preliminary.
[24] Data from Penn World Tables Mark 6.1, variable: *ki*.

This shortened period creates a notable selection bias. Truncating the data in this way increases Africa's share of total coups from 43% over the expanded timeframe to 52% for the countries for which we have data on private investment share, and from 48% to 65% in a sample restricted by the data on private capital flows. This restricted data also includes only 35% of the total number of Latin American coups which occurred after 1950, 58% of the total Asian coups during this period, and excludes almost all of the coups in the Middle East and North Africa (MENA) – including all five of Syria's coups. Thus, while common sense indicates that Feng (2001) and other proponents of the use of private investment data are correct in their assertion that this is a much better way of tracking investor behavior, a concerted effort must be made to extend these measures beyond 1970 in order to diminish this bias.

4.3. Other Variables[25]

The economic variables included in the model are as follows:

- *LOGRGDPLCHANGE* is the log change in real GDP (constant 1995 dollars, Laspeyes model), included because *ki* is expressed as a percent of GDP.
- *MEANLOGKICHANGE* is the mean of the log changes in *ki* between t+1 and t-1 for five years prior to the year of the coup. Included to control for 'normal' fluctuation in LOGKICHANGE.
- *LOGGDPPERCAP*, the log transformation of data on per capita GDP (constant dollars), is also included as a control.[26]

In addition, I include three measures intended to capture country-specific characteristics:

- *CNUM* takes value *n* (1-10 for these data) indicating that the case is the *n*th coup experienced by the country since 1950
- *COUPPREVYR* is a dichotomous variable which takes a value of 1 if a country experienced a coup in the year prior to the case under observation
- *AFRICA* is a regional dummy variable for countries in sub-Saharan Africa, which I have included in light of the debate over the extent to which this region has peculiar properties with regard to growth and investment (see Fosu 1999; Nkurunziza and Bates, 2003).[27]

[25] Time-dependent fixed effects for every half decade between 1950-2000 were also included in every model (with 1950-1954 excluded), but are not displayed in the table.
[26] All economic data are from the Penn World Tables, Mark 6.1.
[27] Regional dummies for other areas were excluded from the models, since the Africa/not-Africa question is the most interesting, theoretically, when they were included none had significant effects in the regression equations, and the models were robust to their exclusion.

4.4 Regression Results

This model was tested using ordinary least squares (OLS) regression (Table 1).[28]

Table 1 DV: logkichange	[1]	[2]	[3]	[4]	[5]	[6]
STRBL			.230* (.139)	.228 (.141)	.230* (.141)	.291*** (.117)
STRGT		-.067 (.095)	-.170 (.113)	-.167 (.114)	-.168 (.114)	-.135 (.097)
STLFT		-.314** (.142)	-.326** (.141)	-.327** (.142)	-.321** (.144)	-.317*** (.127)
STINDET		-.087 (.092)	-.079 (.091)	-.079 (.092)	-.080 (.092)	-.014 (.081)
WKRGT		.054 (.114)	.048 (.114)	.058 (.129)	.044 (.115)	.118 (.098)
WKLFT		.153 (.129)	.137 (.128)	.136 (.129)	.132 (.132)	.078 (.109)
BLOODLESS		.160** (.072)	.088 (.083)	.088 (.084)	.090 (.084)	.027 (.074)
RGFI				-.027 (.151)		
ELCIV					.017 (.081)	
COUPNUM	.004 (.019)	.001 (.018)	.003 (.018)	.003 (.018)	.003 (.018)	.003 (.017)
COUPPREVYR	.179* (.098)	.186* (.099)	.177* (.098)	.177* (.099)	.179* (.099)	.138* (.085)
AFRICA	-.516 (.089)	-.061 (.089)	-.072 (.089)	-.072 (.089)	-.073 (.089)	-.070 (.068)
LOGRGDPLCHANGE	-.294 (.317)	-.205 (.317)	-.212 (.315)	-.207 (.317)	-.201 (.320)	.004 (.259)
MEANLOGKICHANGE	.309** (.134)	.292** (.134)	..287** (.133)	.282** (.137)	.290** (.135)	.206* (.124)
LOGGDPPERCAP	.014 (.044)	.020 (.043)	.009 (.043)	.010 (.043)	.008 (.044)	
CONSTANT	-.093 (.326)	-.138 (.319)	-.019 (.325)	-.022 (.326)	-.015 (.326)	-.054 (.096)
N	132	132	132	132	132	156
R-squared	.098	.207	.226	.226	.226	.202
Adjusted R-squared	-.001	.073	.087	.078	.079	.090
Prob>F	.469	.085	.060	.081	.081	.028

*** p<.01, ** p<.05, * p<.1
The models also control for time-dependent fixed effects by including dummy variables for every half-decade from the late 1950s to the late 1990s

[28] OLS regression is justified; a Smirnov-Kolmogorov test indicates that *logkichange* has normally distributed residuals, a Breusch-Pagan/Cook-Weisberg test indicates homoskedasticity, and there are no apparently influential outliers (as evidenced by visual inspection and Cook's D testing). The signs and significance levels are robust to the use of robust standard errors.

Broadly speaking the results support my intuitions. The coefficients for strong, left-leaning coups are negative and quite large across all models (and statistically significant at 5% or better), indicating that coups of this type are, indeed, associated with a substantial decrease in aggregate investment in comparison to coups which empower weak, neutral governments. The interaction term STRBL is also statistically significant across most models, demonstrating the importance of this joint effect. Although this interaction term is not statistically significant in model 4 - which also includes the variable for right-leaning intervention – the import of this point is dampened by the fact that the inclusion of the variable for foreign intervention decreases the model's overall fit. The remainder of the political variables are not statistically distinguishable from the excluded type across the models – though the STINDET, BLOODLESS, and ELCIV variables are signed as expected.

Some of the coefficients do exhibit surprising signs. The fact that the two types of weak coups are both positively signed is quite interesting, though they are not statistically distinguishable from the effects of a weak, neutral coup. Nonetheless, this point bears further investigation (perhaps with disaggregated data on *public* investment), since there is a very plausible story to be told about weak governments buying support in the wake of a coup. Though also not statistically significant, the negative signs on STRG and RGFI are not what I predicted. It is similarly difficult, however, to tell if this is a real effect or an artifact of the problem associated with using the aggregated investment data suggested earlier by the Ghana case. It seems quite plausible that strong right-leaning governments (and/or those explicitly supported by the US or France) might cut spending on public investments in the year after they take power. Again, an improved investment measure – coupled with case-studies – would help to illuminate this question.

Excluding the proxy for wealth – logged GDP per capita – improves the overall fit of the model (6). This point is interesting not only because proxies for wealth so often make important contributions, but because the inclusion of this wealth variable substantially decreases our degrees of freedom (from 156 to 132), a loss which is concentrated among the earliest coups in the group. One would like to see the effects of including a proxy for wealth in this slightly larger sample.

Finally, although AFRICA takes the expected negative sign, African coups are not statistically distinguishable from non-African coups in this model. This finding is noteworthy in light of the number of other coups which have found that Africa is 'just different,' and I will briefly return to this point in the conclusion.

We can get a better sense of the substantive implications of the model by examining predicted values for the results of particular interest (coefficients from model 6).[29]

Table 2: Predicted Change in Aggregate Investment (%GDP, Constant Dollars)
(Relative to a Baseline Level*)
(95% confidence intervals in parentheses)

		Given strong military leadership, what is ideology?	
		Right	Left
Was the Coup Bloodless?	Yes	19.8% (-0.8%, 39.5%)	- 22.3% (-48.7%, 1.5%)
		Baseline level -13.6% (- 36.2%, 11.2%)	
	No	- 12.4% (- 29.9%, 4.2%)	- 25.0% (- 45.2%, 5.7%)

Coefficients taken from Model 6

*Obtained by setting all other variables at median values.

These results lend support to my intuition that investment models might be well-served by paying more attention to the differences between coups. Bloodless coups which install strong, right-leaning governments are associated with a nearly 20% *increase* in aggregate investment share of GDP over a baseline coup – in comparison to their strong, violent, left-leaning counterparts which are associated with an investment-share *decrease* of 25% relative to the baseline.

[29] The predicted effects in Table 2 were calculated using STATA's "Clarify" package (Tomz, *et al.* 2003).

5. Conclusion

This paper began with a simple premise: systematic differences between coups may cause investors to behave differently in their wake. Indeed, I argued, paying more attention to the characteristics of coups could help to account for the wide disparity in the results of studies linking coups and political instability to investment and growth. I posited that investors might respond favorably in the wake of a coup if the new government has *both* investor-friendly policy preferences and strong military support - particularly when the coup which installed the regime was bloodless. Next I turned to a brief case study of Uganda's 1971 coup to demonstrate the way in which investment-friendly (and, ultimately, unfriendly) shifts in the wake of the coup might affect investment 'on the ground.' Finally I tested my hypotheses cross-nationally with a new dataset on coup-attributes. These results support my intuition: other factors equal, right-leaning, bloodless coups perpetrated by military leaders appear to be less harmful to investment than other types of coups.

What are the potential implications of this finding? The intuition that the *type* of coup matters for economic outcomes may have significant implications for a variety of research agendas. Of particular interest is Africa's failure to thrive. Rudimentary correlations (Table 2, below) describe the vastly unequal distribution of coup-types across regions: Africa has had far fewer than its fair share of strong, right-leaning, bloodless coups (the least inimical to investment, according to my findings) and more than its fair share of violent ousters (the most investment-inhibiting).

Table 2: Correlations between regions and coup-attributes				
	Africa	Asia	Latin America	MENA
STRBL	-.250	.494	-.001	-.054
BLOODLESS	-.111	.262	-.016	-.031
STRG	-.329	.387	.182	-.120
STLFT	-.032	-.081	.032	.101
STINDET	.008	-.068	.056	-.035
WKRGT	.032	-.111	-.018	.104
WKLFT	-.005	-.034	-.003	.061
WKINDET	.264	-.187	-.172	-.020
RTFORINV	-.032	-.081	.077	.015

When viewed in this context it is perhaps less surprising that Thailand (with eight bloodless coups in 40 years, and five since 1960) does not seem to have suffered from its instability as much as Ghana (which has also had five coups since 1960) .

Where do we go from here? Perhaps the clearest need is to revisit this question with improved investment data – particularly disaggregated figures for public and private investment. I have begun to code early FDI data for particular OECD countries, and I hope that this project will not only help to fill-out some of the missing economic data for early coups, but also shed light on the way that individual countries may react to particular coup-attributes. I also intend to explore the extent to which there may be a reputational effect on FDI for regions or sub-regions, as investors use previous coups in a region to inform their behavior in the face of new coups – or the possibility of new coups.

Finally, what are the policy implications of this conclusion? These results do not imply that staging coups of particular types is a good way to bolster ailing investment rates – particularly since I have not made comparisons between countries that have experienced coups and countries which have not. Indeed, it seems very likely that a country which *never* has coups

presents a far more appealing opportunity for investment than a coup-prone country – even if the latter is prone to having 'investment-friendly' coups.

These findings do, however, have interesting implications for would-be coup leaders. Coups appear to have far less deleterious effects on investment if they are not only bloodless, but usher in a strong government which quickly makes overtures to private investors. Indeed, although one would almost never advocate a coup in lieu of a democratic change of government, if the seizure is a *fait accompli* then it appears that there may be some things a coup leader can do – such as preventing bloodshed - which might be able to reduce the economic toll of the action.

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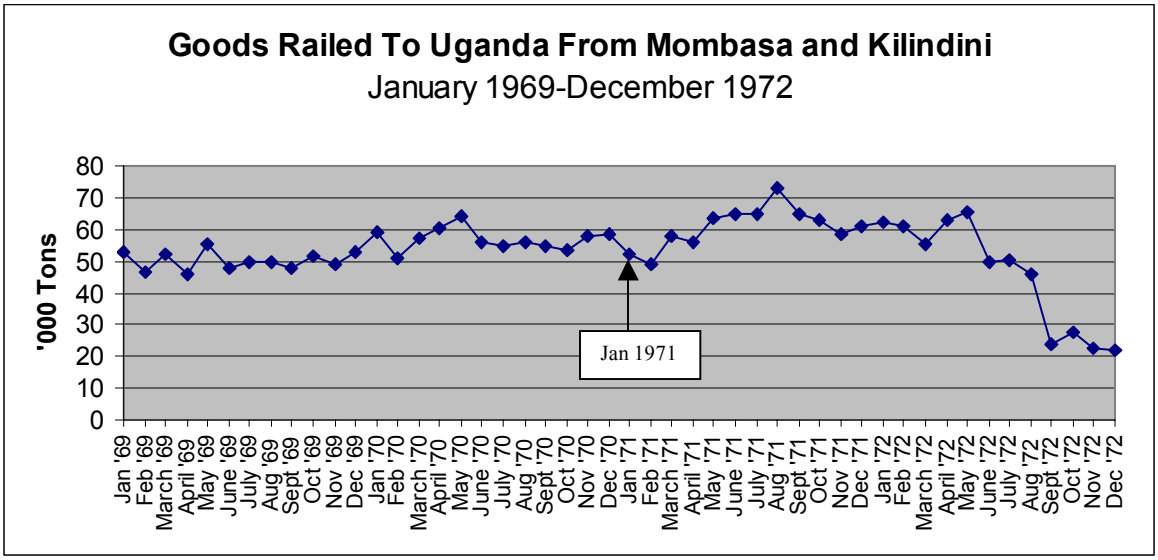
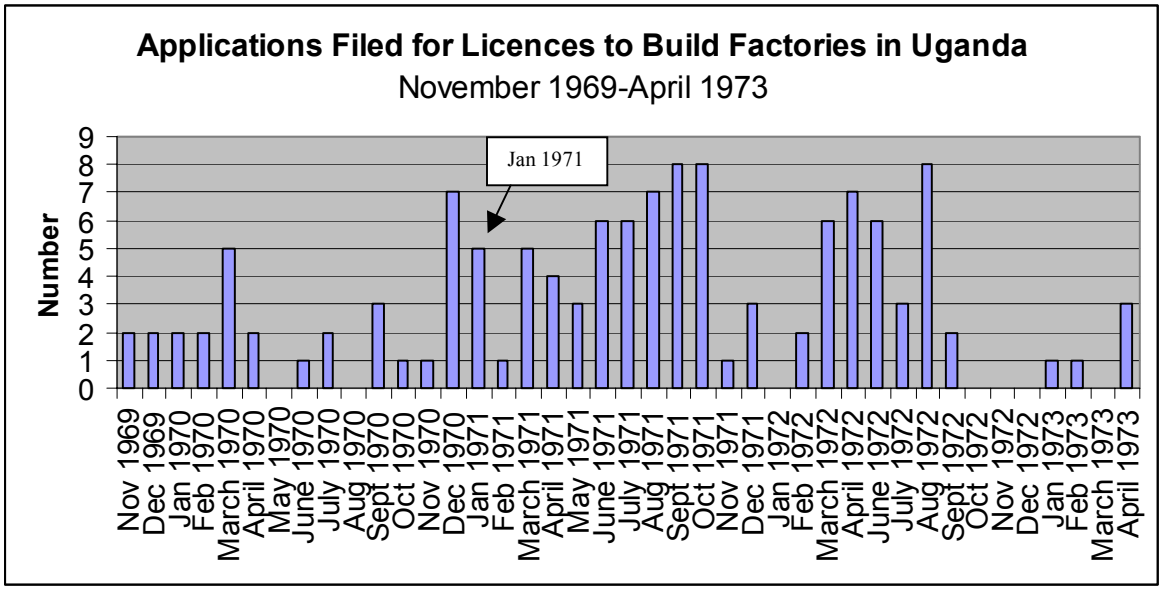
Appendix: Uganda Figures



Source: Statistical Abstracts of the Republic of Uganda, 1973 and 1974



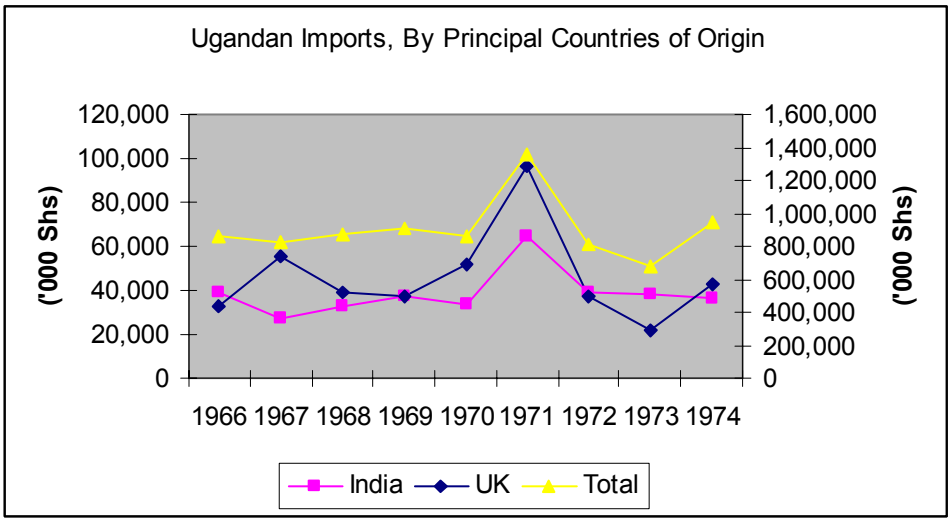
Source: Uganda Gazette, 1969-1974

Appendix: Uganda Figures

Uganda, Private Capital Flows (millions of Shillings)

Year	Inflow	Outflow	Net
1966	113	28	85
1967	115.7	57.6	58.1
1968	158	159.7	-1.7
1969	173.7	219.7	-46
1970	39	297.7	-258.7
1971	183.4	143.9	39.5
1972	200.8	462.6	-261.8
1973	173.4	461.4	-288
1974	139.4	301	-161.6
1975	175.4	504.2	-328.8

Source: "The Action Programme; A Three Year Economic Rehabilitation Plan 1977/78-1979/80" Republic of Uganda, 1975. p. 37-38.



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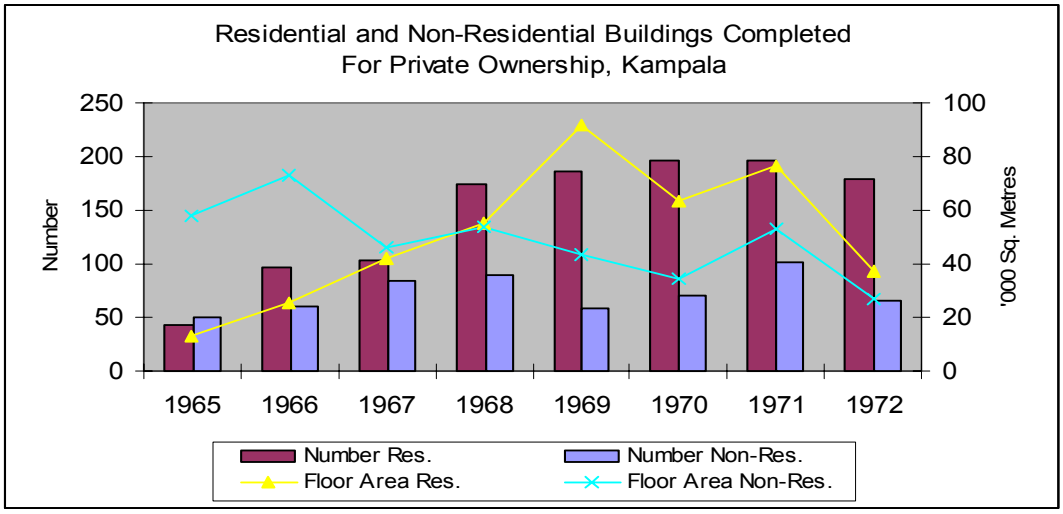
Appendix: Uganda Figures



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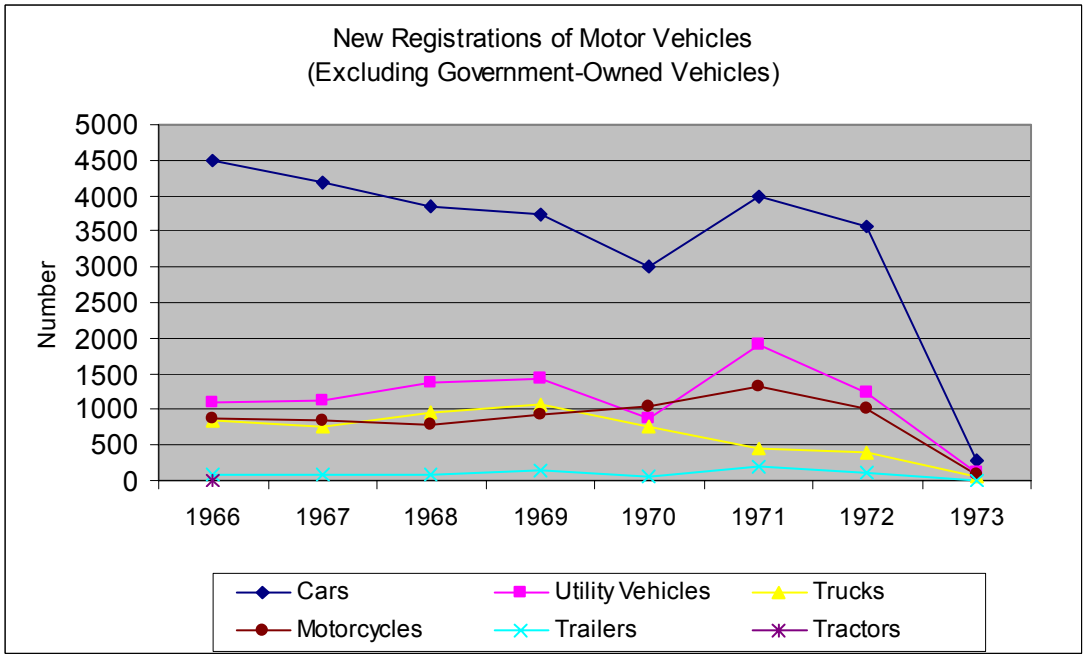

Source: Statistical Abstracts of the Republic of Uganda, 1973 and 1974

Appendix: Correlations Across Variables

	meanlogki	lggdpperc	lggdprch	cnum	couprvyr	africa	cright	cleft	cindet	milhead	bloodless	Str.right	Str.left	St.indet	Wk.right	Wk.left	Wk.Indet	Str.bl.right
MEANLOGKI	1																	
LOGGDPPERCAP	0.5831	1																
LOGRGDPLCHANGE	0.3025	0.2328	1															
COUPNUM	0.1793	0.1342	-0.0197	1														
COUPPREVYR	-0.0571	0.113	-0.0089	0.2924	1													
AFRICA	-0.5811	-0.6982	-0.2007	-0.1895	-0.0849	1												
COUPRIGHT	0.1593	0.2733	-0.0499	0.0258	0.2375	-0.2425	1											
COUPLEFT	0.1885	0.1282	0.1207	-0.0108	-0.1515	-0.0647	-0.2971	1										
COUPINDET	-0.1666	-0.2517	0.0002	-0.0219	-0.0856	0.1155	-0.2971	-0.1466	1									
MILHEAD	0.1872	0.2669	0.3271	-0.0036	-0.0067	-0.3099	0.2756	-0.1175	-0.0266	1								
BLOODLESS	0.0117	0.0968	0.0984	0.0456	-0.0446	-0.1226	0.1801	-0.1734	0.0659	0.2316	1							
STRGT	0.1735	0.3029	0.1098	0.0614	0.2449	-0.3141	0.7999	-0.2377	-0.2377	0.5459	0.241	1						
STLFT	0.1516	0.1001	0.0972	-0.044	-0.0933	-0.0319	-0.1829	0.6157	-0.0902	0.2073	-0.0942	-0.1463	1					
STINDET	-0.0901	-0.1697	0.0462	-0.0906	-0.1066	0.032	-0.2091	-0.1031	0.7037	0.2369	0.0651	-0.1673	-0.0635	1				
WKRGT	-0.002	-0.0114	-0.247	-0.0506	0.0178	0.0784	0.4241	-0.126	-0.126	-0.3743	-0.07	-0.2043	-0.0776	-0.0887	1			
WKLFT	0.1104	0.0776	0.0705	0.0236	-0.1128	-0.0549	-0.2213	0.7448	-0.1092	-0.3242	-0.1399	-0.177	-0.0672	-0.0768	-0.0938	1		
WKINDET	-0.1388	-0.1741	-0.0485	0.0649	-0.0076	0.1284	-0.1964	-0.0968	0.6608	-0.2877	0.0238	-0.1571	-0.0596	-0.0682	-0.0833	-0.0721	1	
STRBL	0.0968	0.252	0.0675	0.0914	0.1525	-0.1903	0.526	-0.1563	-0.1563	0.359	0.5806	0.6576	-0.0962	-0.11	-0.1344	-0.1164	-0.1033	1

Appendix – Descriptive Statistics

	Full Data	*Full Data*	*Model 1-5*	*Model 1-5*	*Model 6*	*Model 6*
	X=1	*X=0*	*X=1*	*X=0*	*X=1*	*X=0*
BL	69	125	44	90	55	103
STRBL	28	166	19	115	25	133
STRGT	52	142	37	97	48	110
STLFT	12	182	8	126	9	149
STINDET	39	155	30	104	33	125
WKRGT	21	173	14	120	18	140
WKLFT	17	177	10	124	13	145
WKINDET	50	144	32	102	35	123
RGFI	12	182	8	126	9	149
ELCIV	40	154	28	106	34	124
	Obs.		*Obs*		*Obs*	
late 1950s	12		0		10	
early 1960s	25		18		19	
late 1960s	28		25		25	
early 1970s	23		19		21	
late 1970s	31		23		29	
early 1980s	21		16		18	
late 1980s	13		10		10	
early 1990s	16		14		14	
late 1990s	11		9		9	
	Obs.		*Obs*		*Obs*	
AFRICA	91		69		79	
ASIA	17		12		16	
LATIN AMERICA	68		49		59	
MENA	13		4		4	
	Obs	*Mean*	*Std. Dev.*	*Min*	*Max*	
LOGKICHANGE	171	-.033	.147	-.514	.398	
MEANLOGKICHANGE	155	.925	.340	-.027	1.576	
LOGGDPPERCAP	154	6.366	.977	4.556	8.866	
LOGRGDPLCHANGE	171	.001	.050	-.243	.146	
	X=1	*X=2*	*X=3*	*X=4-6*	*X=7-10*	
COUPNUM	62	49	34	46	10	