Fighting for Rents: Agricultural Windfall Gains and Social Change in Land-Abundant Developing Countries

Anna K. Hvid*

Technical University of Denmark, Risoe Campus, Frederiksborgvej 399, 4000 Roskilde, Denmark

Abstract: In recent years, a global increase in demand for agricultural commodities and land has contributed to increasing agricultural prices. This trend can be expected to continue in the future, and may result in significantly higher land rents. This paper investigates the potential distributional effects of increasing land rents in land-abundant developing countries from a theoretical viewpoint, and provides historical case examples to support the theoretical propositions. It is proposed that the specific characteristics of a rent-generating natural resource have implications for the concentration of economic and political power and hence the distribution of rents. Specifically, when it comes to agricultural land, the characteristics of land imply that the organizational capacity of farmers is a crucial determinant of the distribution of agricultural rents. The historical case examples indicate that the extent of organizational capacity may be determined by land inequality, the heterogeneity of farmers and the political environment.

Keywords: Rent seeking, agricultural windfall gains, developing countries, land grab, natural resources.

1. INTRODUCTION

The demand for arable land for the production of food and fuel has increased in recent years, and can be expected to continue to do so in the future (e.g. Deininger *et al*., 2011; Robertson and Pinstrup-Andersen, 2010). This is driven by an increasing world population, increasing demand for land-intensive food products, and increasing focus on climate change issues creating an increasing demand for biofuels (e.g. Robertson and Pinstrup-Andersen, 2010). Since the size of arable land is more or less constant, increasing demand, all else being equal, implies increasing agricultural prices and increasing land rents.

Opinions on the potential effects of increasing global demand for arable land in land-abundant developing countries differ widely. Some point to the potential for agriculture to attract foreign as well as domestic investment, which would increase agricultural efficiency and contribute to poverty alleviation and general economic development, while others point to the risk of a 'scramble for land', causing an increase in poverty and income inequality within, as well as across, countries (e.g. Deininger *et al*., 2011; Robertson and Pinstrup-Andersen, 2010). This study investigates the circumstances determining whether increasing land rents will mainly be appropriated by small and wealthy elites[1], or whether the larger groups of relatively poor farmers will be able to keep the rents, implying a more equal distribution of wealth. While the focus of the study is on distributional effects, economic efficiency effects are also considered.

Several studies have suggested that in weakly institutionalized countries, i.e. countries with no or few constraints on economic and political behaviour, large natural resource abundance affects politicians' incentives and creates a tendency for political and economic power to be closely related and highly concentrated, because political power can be used to obtain control over natural resource revenues, and at the same time, this wealth can be used to obtain more political power (e.g. Acemoglu and Robinson, 2001; Oechslin, 2010; de Luca, Litina, and Sekeris, 2012).

However, this is not necessarily so for all types of natural resources, since different types of natural resources may affect incentives in different ways. For example, the literature on the resource curse distinguishes between point source, and diffuse, natural resources (e.g. Isham *et al*., 2005; Boschini, Pettersson, and Roine, 2007). Point source resources are typically highly geographically concentrated, highly capital and skill intensive, and have a high economic value (typical examples are oil and minerals), while diffuse resources are geographically spread out, have a low skill and capital intensity, and have a low economic value (the typical example is agriculture).

In weakly institutionalized countries, small and homogeneous groups with access to skills and capital have a comparative advantage in obtaining resource rents from point source resources, relative to large and heterogeneous groups without access to skills and

*Address correspondence to this author at the Technical University of Denmark, Risoe Campus, Frederiksborgvej 399, 4000 Roskilde, Denmark; Tel: +4546775157; Fax: 46775199; E-mail: anhv@dtu.dk

[1]I do not distinguish between the appropriations of rents via, for example, selling or leasing land to foreign investors, excessive taxation of agricultural output or land grabs.

E-ISSN: 1929-7092/13

capital, because the costs of organizing and obtaining political influence, and thereby control over resource rents, are lower for the smaller group while the benefits are larger (Bates 1981)[2]. In relation to this, a study by Boschini, Pettersson, and Roine (2007) introduces the notion of appropriability, where the level of appropriability of a natural resource increases with its economic value and geographic concentration, which implies that point source resources are more appropriable than diffuse resources. The study argues that more appropriable resources induce more rent seeking behaviour, which leads to economic inefficiencies and regressive distributional consequences for countries with low quality institutions.

Since agriculture has so far been of relatively low value, it has been categorized as a diffuse resource with very low appropriability, but if the value of agricultural output increases, its level of appropriability may increase, which in turn may have consequences for distributional and economic outcomes. However, the level of appropriability of high value agriculture cannot, a priori, be determined, because of the combination of *high* economic value and *low* geographic concentration. This combination of characteristics makes it difficult to determine whether it is of the point source of diffuse type, and hence makes it difficult to predict how, in interaction with institutions, it will affect distributional and efficiency outcomes. Looking at agriculture as a high-value natural resource could potentially change the way in which arable land affects distributional and economic outcomes, because it may create some fundamentally different incentives than those arising from conventional diffuse natural resources. In short, all else being equal, high value agriculture introduces a situation where a high value natural resource is more accessible to a larger and more diverse group of individuals, than is most often the case with point source resources. However, rent seeking, for example in terms of land-grabbing or excessive taxation of agricultural output, may change this situation to one in which high-value land would end up having the same type of effects as point source resources.

The aim of this study is to contribute to a better understanding of the distributional consequences of increasing agricultural prices in land-abundant developing countries, by viewing arable land as a potentially high value natural resource, and investigating the consequences for appropriation of rents by different groups, induced by increasing prices. I focus on the ability of farmers to organize, given by their size and their degree of social heterogeneity, as the main determinants preventing appropriability by elites. The study also contributes to the general resource curse literature by analysing a 'new' type of natural resource that cannot, a priori, be defined as either point source or diffuse.

I begin by reviewing the literature on the relationship between natural resources and political and economic concentration, and, based on this, I develop a general theoretical framework to make a more formal and systematic analysis of the relationship between political and economic concentration and the effects of agricultural price changes. When it comes to the empirical part, the phenomenon of persistent and strong agricultural price increases is so far more of a prediction of the future than a historical fact, and research and data on the subject is therefore sparse (see e.g. Robertson and Pinstrup-Andersen, 2010; Arndt *et al*., 2009). However, there are several historical examples of countries facing an opportunity to obtain large agricultural rents, with different distributional and efficiency outcomes. I present and compare these examples, draw some general conclusions, and relate these conclusions to the theoretical framework.

The study is closely related to a study by Willebald (2011), which in a similar way analyses the appropriability of land and its effect on distributional and general economic outcomes. However, Willebald (2011) analyses the situation of an open land frontier where initially, unused land is taken into production in an environment where no institutions exist, but are determined endogenously. The present study analyses the situation where land is initially occupied and institutions exogenously given. Moreover, while the appropriability of land is given by its value (quality) in Willebald's framework, I consider land to be homogeneous and analyse appropriability as given by value and the organizational capacity of farmers. Hence, while the study by Willebald (2011) suggests that high value land creates higher inequality and thereby lower economic development (*via* adverse institutions), high value land does not necessarily have adverse distributional and efficiency effects in the framework presented here. Therefore, by analysing the

[2]For example, small and homogeneous groups have lower transaction costs and a lower likelihood of free-riding. Moreover, since the extraction of point source natural resources is typically highly capital and skill intensive, a group with access to these factors is able to generate higher rents than groups without such access.

effects of valuable land in situations where institutions are already established, this study supplements the work of Willebald.

A current example of a potentially high-value agricultural commodity is energy crops for biofuels. According to Matondi, K., and Beyene (2011), the politics of biofuels can be regarded as a power game, where the elites decide on behalf of rural smallholders who do not have a strong voice in bilateral agreements, investments, or trade policies made within the regional and international systems. However, when small-scale farmers begin to suspect that they may lose their rights, they attempt to negotiate through political channels in order to seek more secure tenure over their land resource.

Indeed, as the present study suggests, the extent to which farmers are able to reap the benefits of high-value agriculture crucially depends on their ability to organize and obtain political influence. However, the structure of such organization is important for the outcome. For example, while some studies suggest that high land inequality increases collective action among large-scale farmers, providing them with political influence and hence enabling them to oppose rent seeking by political elites, other studies suggest that such land inequality, rather than inducing rent seeking by political elites, induces large-scale farmers to appropriate rents from small-scale farmers. Hence, land inequality, which enables a subgroup of farmers to organize effectively, merely results in a shift in the rent seeking efforts from political elites to large-scale farmers. The findings in this study suggest that in the most optimal situation, the entire farming sector is able to organize and obtain political influence.

The paper is organized as follows. The next section investigates how economic and political power are related in general, describes the political-economic equilibrium, and discusses how agricultural windfalls may change this equilibrium. Section 3 presents different historical examples of the distributional and efficiency outcomes of agricultural windfalls, from which some general conclusions are drawn, and subsequently discussed in relation to the theoretical framework presented in section 2. Section 4 concludes.

2. ECONOMIC AND POLITICAL CONCENTRATION

Theoretical as well as empirical studies have suggested a close relationship between political and economic concentration in weakly institutionalized countries (e.g. Guimaraes and Sheedy, 2012; de Luca, Litina, and Sekeris, 2012; Acemoglu, Robinson, and Verdier, 2004). Many theories suggest that economic inequality is likely to lead to political inequality, so that wealthy individuals often also become politically powerful, while at the same time other, equally plausible theories suggest that political inequality, i.e. the concentration of political power in the hands of a few, is likely to lead to economic inequality, as the politically powerful use politics to become richer (Acemoglu, Robinson, and Torvik, 2013).

Moreover, many studies on endowment economies (countries with low levels of industrialization and a high dependency on primary production), suggest that in countries with high levels of point source resources, those in power can use their political superiority to extract natural resource rents (e.g. Ross, 2001a), and therefore, point source natural resource dependency tends to reinforce the relationship between economic and political concentration. Specifically, because point source resources are highly appropriable, they are more susceptible to concentrated ownership by politically powerful groups.

The strength of the relationship between economic and political concentration depends on a country's institutional quality because institutions set the stage for the potential for rent seeking by political elites, as well as for the potential for wealthy individuals to obtain political power (e.g. Persson, Roland, and Tabellini, 1997; Acemoglu, Robinson, and Torvik, 2013). A situation with large point source resource dependency and weak institutions thus tends to create an equilibrium which is characterized by a high concentration of political and economic power, where a relatively small group is able to solve the collective action problem efficiently and obtain political power, thereby obtaining control over valuable economic resources.

However, an increase in agricultural prices may change such an equilibrium. This is because of the characteristics of land, which, on certain crucial dimensions, differ from those of conventional point source resources. Specifically, high value land has a potential to be less appropriable, since agriculture has a much lower capital and skill intensity as well as a lower geographic concentration, and is therefore much more accessible to the large population of non-elite (rural) individuals.

According to collective action theory, groups facing lower costs and higher benefits from organizing are

able to solve the collective action problem and reap the largest share of a common pool resource (e.g. Jarvis, 2005). Collective action problems tend to be particularly severe in agriculture, because farmers tend to be a large, disperse and heterogeneous group of individuals (Bates and Block, 2009), which implies high costs of organizing. Moreover, because agriculture is typically of relatively low value, the gain per individual from collective action tends to be small. However, if this group manages to solve the collective action problem when facing higher prices, it may actually benefit from its relatively large size in obtaining political influence (see e.g. Banerjee *et al*., 2001), since, all else being equal, a large and well-organized group is more effective than a small one.

I propose that an equilibrium of high economic and political concentration could change in the event of increasing agricultural prices. In effect, increasing agricultural prices provide an incentive for the farmers to organize and attain political influence, because the higher land rents increase the benefits derived from political influence relative to the costs.

To see this more formally, suppose we have two groups, farmers and elite. Define political concentration in period t as $M_t = \frac{M_t^f}{M_t^e}$, where M_t^f is the share of political power possessed by the farmers, and M_t^e is the share of political power possessed by the elite. Moreover, we have $M_t^f + M_t^e = 1$. Similarly we define economic concentration as $I_t = \frac{I_t^f}{I_t^e}$, where I_t^f is the share of income accruing to the farmers and I_t^e is the share accruing to the elite, and $I_t^f + I_t^e = 1$. Hence, when M_t and I_t equals zero, this corresponds to a situation where the elite is in possession of all political power and economic resources, while when M_t and I_t are close to one, we have perfect equality where the farmers and the elite possess an equal amount of political power and economic resources. Moreover, farmers are able to obtain political power and economic resources if they decide to organize. In the following I only model the decision of the farmers and assume that the political power and economic resources accruing to the elite is simply $1 - M^f$ and $1 - I^f$ respectively.

I assume organization is costly and that the cost of organizing for the farmers is a function of their degree of social heterogeneity, $h \in \{0;1\}$, as well as the quality of institutions, $s \in \{0;1\}$. Hence, the cost is given by $C(h,s)$ where $\frac{\partial C}{\partial h} > 0$ and $\frac{\partial C}{\partial s} < 0$. The benefit of organizing is a function of the agricultural prices, $I_t^f(p_t)$ where $\frac{\partial I_t^f}{\partial p_t} > 0$. This is because, if the farmers are organizing they are able to keep the revenue generated in agriculture, which is a function of the prices. The net benefit of organizing then is $NB = I_t^f(p_t) - C(h,s)$, and the farmers will organize if this is positive, i.e. if $NB > 0$. In other words, the larger is the level of heterogeneity and the lower is the quality of institutions, the larger must the price increase be in order for NB to be positive[3]. Let $\hat{I}_t$ be the level of income concentration which gives the farmers the level of income that makes them indifferent between organizing and not organizing, that is, the point where $I_t^f(p_t) = C(h,s)$. Hence, $\hat{I}_t$ reflects the organizing costs for the farmers, and we assume that this point is given by $\frac{h}{s}$, reflecting that if heterogeneity is very high and/or institutional quality is very low, the price increase giving rise to an increase in $I_t^f(p_t)$ (implying an increase in I_t), must be high in order for the farmers to choose to organize.

Further I assume that it might only be a subgroup of the farmer population that decides to organize. Let n denote the share of the farmer group that decides to organize. A low n could for example reflect a situation with high inequality within the farmer group, making it more beneficial for the farmers owning large tracts of land to organize (due to their larger agricultural output), resulting in a situation where only the subgroup of large scale farmers choose to organize. Hence, $0 \le n \le 1$ and when $n < 1$ only a subgroup of the farmer population organizes. When farmers (or a subgroup of farmers) decide to organize, organizational capacity, that is, the extent to which farmers are able to obtain political power and economic resources, is given by the size of the organizing farmer group, n, as well as the institutional quality, s. When farmers do not organize at all, we set $M_t^f = 0$ and hence $M_t = 0$.

When the system is in equilibrium political and economic concentration are equal, i.e. $M_t = M_{t+1} = I_t = I_{t+1}$. Assume that before the price increase, say in period $t = 0$, the elite possess all economic power and all economic resources, i.e. $M_{t=0} = I_{t=0} = 0$. Then, when a price increase occurs, say in period $t = 1$, the system is pulled out of its initial

[3]Note that this is under the assumption of no (or imperfect) capital markets, so that farmers cannot borrow against future expected income, but only have the income available to them today.

equilibrium, because the higher income generated by the higher prices, accrue directly to the farmers, increasing their income relative to the elite. That is, in period $t=1$, $I_{t=1}$ increases exogenously because $I^{f}_{t=1}(p_{t=1})$ increases due to the increase in price. Note that this only holds for the period in which the price increase occurs. From the next period, $t=2$, the elite may begin to appropriate the rents generated from the higher prices, or the farmers may begin to organize and thereby increase their share of income and political power.

When the system is out of equilibrium, i.e. when $t \geq 1$, and if the farmers decide to organize, we assume that income and political concentration are dynamically interdependent in the following way:

1) $M_t(I_t,h,n,s)$: Political concentration in period t is a function of income concentration in period t, the degree of heterogeneity, the size of the organizing farmer group, and the quality of institutions.

2) $I_{t+1}(M_t)$: Income concentration in period $t+1$ is a function of political concentration in period t. That is, a group can use its political power today to ensure economic wealth tomorrow.

3) $M_{t+1}(I_{t+1},h,n,s)$: Political concentration in period $t+1$ is a function of income concentration in period $t+1$, the degree of heterogeneity, the size of the organizing farmer group, and the quality of institutions. And so on.

Let us say that organizational capacity of the organizing farmers is given by sn. That is, the larger is the organizing group, the more effective is it in obtaining a larger share of economic and political power. In addition, farmers are able to do this more effectively when formal institutions are of better quality. Normalizing organizational capacity of the elite to 1, we have an equilibrium given by $M^{*} = sn = M_t = M_{t+1} = I_t = I_{t+1} = I^{*}$. We assume that when the political power share of the farmers is larger than their income share, they are able to use this *excess* political power to increase their income share, while when their income share is higher than their political power share, the elite will appropriate income from the farmers. Moreover, outside of equilibrium economic and political concentration only adjusts gradually. We assume that the functional form of $M_t(I_t,h,n,s)$ is given by

$$M_t = (I_t - sn)\left(I_t - \frac{h}{s}\right)(I_t - 1) + I_t \tag{1}$$

Moreover, we assume that income inequality in period $t+1$ is simply given by

$$I_{t+1} = M_t \tag{2}$$

Substituting (1) into (2) gives

$$I_{t+1} = I_t + (I_t - sn)\left(I_t - \frac{h}{s}\right)(I_t - 1) \tag{3}$$

which is a dynamic equation where income concentration in period $t+1$ is given by income concentration in period t plus the difference between income concentration and organizational capacity, $(I_t - sn)$, weighted by the term $\left(I_t - \frac{h}{s}\right)(I_t - 1)$ which defines how far I_t and M_t are from the point where farmers start organizing ($\frac{h}{s}$) and the end point where there is perfect equality ($I_t = M_t = 1$). Subtracting I_t on both sides of (3) gives

$$\dot{I}_t = (I - sn)\left(I_t \frac{h}{s}\right)(I_t - 1) \tag{4}$$

In equilibrium we must have $\dot{I}_t = 0$, i.e. I_t does not change from one period to the next. Hence, solving (4) for $\dot{I}_t = 0$, gives

$$\dot{I}_t = 0 \quad when \quad I_t = \frac{h}{s} \quad or\ when$$
$$I_t = sn \quad or\ when \quad I_t = 1$$

Hence, we have three equilibria, where one is given by the point above which farmers start to organize, one is given by the organizational capacity of the farmers, and the last one is given by the point where we have perfect equality of political power and economic resources, i.e. no political or economic concentration. In the following, we will assume that $\frac{h}{s} < sn < 1$. Moreover, (4) is only defined for $I_t \geq \frac{h}{s}$, since below this, farmers do not organize at all, i.e. when $I_t < \frac{h}{s}$, $M_t = 0$ and hence I_t immediately jumps to zero as well. Solving (4) for $\dot{I}_t > 0$ and $\dot{I}_t < 0$, and noting that $\frac{h}{s} \leq I_t \leq 1$, we get

$$\dot{I}_t > 0 \quad when \quad I_t < sn$$

$$\dot{I}_t < 0 \quad when \quad I_t > sn$$

Hence, if the size of the organizing farmer group is relatively high (high n) and/or institutional quality is relatively high (high s), while at the same time the

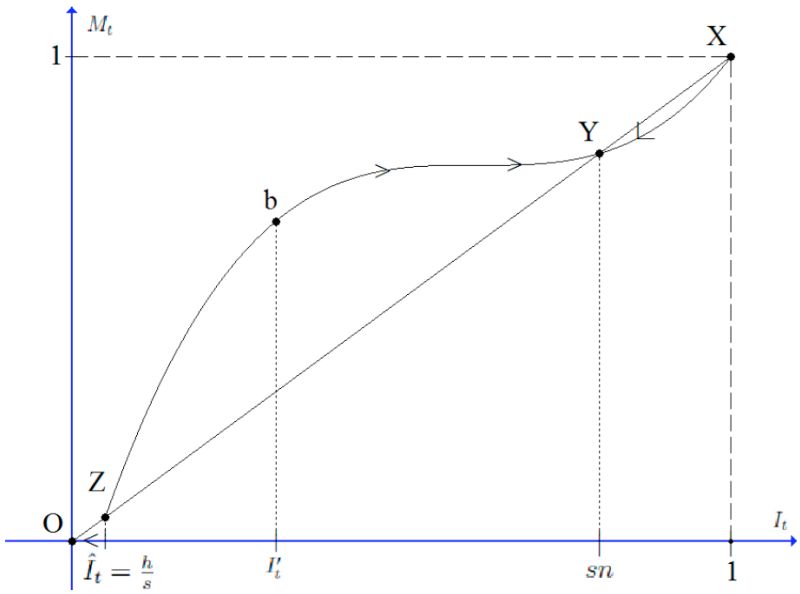

Figure 1: Economic and political concentration and political-economic equilibria.

organizing farmers' income share is relatively low, then the organizing farmers are able to increase their income share. Moreover, if the size of the organising farmers is relatively low (small n) and/or institutions are of low quality (low s), while at the same time the organizing farmers' income share is relatively large, then the elite will appropriate income from the farmers, and hence I_t decreases. This is illustrated in Figure **1**, where the horizontal axis represents economic concentration and the vertical axis represents political concentration. The straight line represents equation (2) and the curved line represents equation (1).

Since in the equilibrium point $I_t = \frac{h}{s}$ we have that $I_t < sn$ (due to the assumption that $\frac{h}{s} < sn$), this equilibrium is unstable because, if we move slightly to the right, I_t begins to increase, and if we move slightly to the left, I_t and M_t jump to zero. Moreover, if the price increase is so large that $I_{t=1}$ moves far to the right, say to $I_{t'}$ in the point b, the system will converge to the new equilibrium in Y because at point b, $I_t < sn$. The point $I_t = sn$ is a stable equilibrium, because moving slightly to the right, I_t decreases towards sn, and moving slightly to the left, I_t starts increasing towards sn. Hence, the stable equilibrium will be given by sn, and therefore, if farmers decide to organize, the equilibrium level of income and power distribution increases in the size of the organizing farmer group and the quality of institutions.

In other words, while institutions affect the decision to organize as well as the equilibrium concentration of political power and income, heterogeneity only affects whether farmers organize or not, while the size of the organizing farmer group determines the new equilibrium after a price increase. Hence, in this rather simplified set-up, agricultural price increases initially reduce economic inequality between the elite and the farmers and, if large enough, create an incentive for farmers to invest in political influence. The share of the economic pie that the farmers are able to obtain in the new equilibrium depends on the size of the farmer group that organizes, as well as the institutional quality.

To sum up, the hypothesis proposed in this section is that (1) an increase in agricultural prices creates rents; (2) these rents create rent seeking behaviour among the elite; (3) if benefits exceed costs, farmers will organize to defend their rents; (4) the costs of organizing are a function of the heterogeneity of the farmers and the institutional quality, and the effectiveness of organization is given by the size of the organizing group as well as the institutional quality.

3. EXAMPLES OF RENT SEEKING IN AGRICULTURE

The importance of collective action and political influence in relation to the distribution of agricultural rents has been documented by several studies (e.g. Conning and Robinson, 2007; Robinson, 2001), both at the micro and macro level. An individual farmer's political connections, as well as farmer groups' capacity to organize and obtain political influence, are important with respect to their ability to keep and obtain land rents.

For example, at the individual level, farmers in Ghana and Vietnam are more likely to have their land expropriated if they do not have social and political power (Goldstein and Udry, 2008; Markussen, 2011), while in nineteenth century Columbia, landowners who were politically powerful had larger and more valuable land holdings relative to other landowners, which indicates that these landowners were able to use their political power to obtain a larger share of valuable land (Acemoglu *et al*., 2007). At the group level, coffee farmers in Brazil have been unable to obtain much of the rent created under the International Coffee Agreement (ICA)[4], due to collective action problems (Jarvis, 2005). Moreover, a study by Bates and Block (2009) finds that while privileged cash crop regions in Sub-Saharan Africa are particular targets for redistributive taxation, the situation is reversed if the president is from that region.

The most widely used instrument of rent seeking by political elites at the macro level (particularly in Africa) is marketing boards, sometimes also referred to as stabilization funds. Marketing boards typically underpay producers when they are under government control, since in this case, politicians and officials with different preferences than those of the farmers have an incentive to use the board for redistributive purposes (Cardenas, 1994). A study by Dalgaard and Olsson (2008) suggests that there is a tendency for rent seeking to increase in the event of commodity windfalls, and more specifically, a comparative study by Cardenas (1994) finds that the taxation of coffee producers increases with world coffee prices, and that the correlation between price increases and taxation is strongest in countries where governmental control over the stabilization funds is strongest.

3.1. Collective Action and the Political and Institutional Environment

Indonesia has been exposed to significant rent seeking in agriculture. For example, the introduction of the International Coffee Agreement mentioned above created large quota rents, which caused rent seeking that redistributed coffee income away from the Treasury and from the farmers toward bureaucrats, politicians and exporters, reduced coffee marketing efficiency and created waste (Bohman, Jarvis, and Barichello, 1996). Hence, in addition to the redistributive consequences of increasing agricultural rents, economic efficiency was also adversely affected. According to Jarvis (2005), Indonesia's total losses due to rent seeking exceeded the potential gains that could have been achieved from the ICA[5]. Another example of rent seeking in Indonesia is that of the oil palm boom. According to McCarthy (2010), oil palm is the most significant boom crop in Southeast Asia, and is associated with large-scale agrarian transformation. The area under oil palm in Southeast Asia grew from 4.2 million hectares in 2000 to 7.1 million hectares in 2009, with millions of additional hectares either in transition or set aside for further development. In a case study of four different villages in Sumatra, the centre of oil palm production in Indonesia, McCarthy (2010) concludes that, as with the spread of cocoa markets in Sulawesi, the spread of oil palm markets in Sumatra was associated with the sale of village common and private land, which resulted in a shift in the ownership of agricultural assets away from poor Melayu (ethnic Malays) towards successful transmigrants and village and district elites. According to Obidzinski *et al*. (2012), land values increased under the palm oil boom in Indonesia, benefiting those with plots, but also inducing conflicts over land, both between communities and companies and between traditional landowners and migrants.

In their comparative study, Fold and Whiteld (2012) suggest that the ability to solve the collective action problem is an important determinant for the contrasting experiences with palm oil in Ghana and Malaysia. From the late 1960s to the late 1980s, Malaysia's palm oil production and processing capacity increased dramatically and it expanded into higher-value products, while from the early 1970s onwards, Malaysia dominated the world market for palm oil. In contrast, successive initiatives in Ghana to stimulate palm oil production have had little success, leaving the country with a small palm oil industry by global standards, unable to compete on the international market. According to this study, an expansion in the volume of palm oil produced depends on access to land and the organization of smallholders, but collective action among palm oil producers in Ghana has been close to non-existent. Trust and a history of solving problems together are crucial for the foundation of

[4]The ICA was an agreement between the principal coffee-exporting and importing countries, which was established to increase the price at which member country exporters sold coffee to member country importers. It attempted to achieve this higher price by restricting exports *via* a global quota, which was distributed among member exporters (Bohman, Jarvis, and Barichello, 1996).

[5]Jarvis (2005) finds that foreign importers captured 48 per cent of the rents, the government captured 35 per cent and domestic exporters about 13 per cent.

relations on which to build collective action. But none of the large estates in Ghana seem interested in taking the lead in strengthening an industry association, as this involves time and resources. In contrast, in Malaysia, a high level of collective action among all actors has occurred which has resulted in the creation of an overall-industry association (the Malaysian Palm Oil Promotion Council), the objective of which is to protect and promote the interests of the entire palm oil sector.

Post-independence Ghana had a large potential for cocoa export rents, but failed to benefit from this potential due to the excessive taxation of cocoa exports. Several studies have suggested that this was mainly due to political reasons. Most of the farmers producing cash crops were from a minority ethnic group (the Ashanti), whose chiefs were one of President Nkrumah's strongest opponents (Acemoglu, Johnson, and Robinson, 2003). The political elite mainly represented the urban population (Bates and Block, 2009), and they heavily extracted rents from cocoa production *via* government controlled marketing boards (Osei, 2005). President Nkrumah's economic policies were part of a political strategy, where state control over the economy was an attempt to keep new political opposition away from an independent economic base (e.g. Acemoglu, Johnson, and Robinson, 2003; Fold and Whiteld, 2012). According to Fold and Whiteld (2012), this strategy was possible because there was no large and economically powerful entrepreneur class with which Nkrumah had to negotiate. Moreover, the general organizational capacity among farmers in Ghana was relatively weak, due to its dysfunctional land tenure system and resulting conflicts over land. Land tenure insecurity is relatively common in Ghana, due to conflicts of interests between and within land owning groups and the state. Land tenure is governed by a combination of customary practices and a formal administrative framework. The traditional system is governed by chiefs, and is characterized by a lack of consistency and coordination as well as viable standards and codes of practice regarding the allocation, administration and management of land (Osei, 2005). In sum, smallholders who were growing cocoa could not solve the collective action problem and were unable to restrain politicians from engaging in the appropriation of cocoa rents (Bates and Block, 2009; Acemoglu *et al*., 2007). In addition to these redistributive consequences, the excessive rent seeking from cocoa production also had negative consequences for economic development in general, since Ghana effectively 'killed its cash cow' by creating disincentives in cocoa production, a sector in which Ghana had a comparative advantage at the time of independence (Acemoglu, Johnson, and Robinson, 2003). In 1949, the cocoa producers received 83 per cent of the world price of cocoa, but by 1983 they only received 6 per cent. This significantly reduced the size of production and the export of cocoa in Ghana (Easterly and Levine, 1997).

According to Bates (1981), major rice farms in northern Ghana are owned by high-level public servants, with the result that rice is sold at domestic prices that lie well above the world market prices. In contrast to the rest of Ghana, in the savannah areas of the north, the state can exercise direct control over rights to 'unused' or 'waste' lands, and these rights are allocated by the national department of lands. Hence, members of the urban elite, who seek to invest in farming and who have connections in the national bureaucracy, have used the power of the lands department to secure acreage for rice production.

As in Ghana, in Cote d'Ivoire, the central government appropriated the large windfall held by the agricultural marketing board during the coffee and cocoa boom (Ross, 2001b). The political elite in Cote d'Ivoire had a small political base and therefore feared that the promotion of general rural development would mobilize political opposition against it. In addition, there were no effective constraints on political elites, and therefore the elite was able to appropriate the rents from coffee and cocoa *via* marketing boards in order to maintain political power (Acemoglu, Johnson, and Robinson, 2003).

Post-independence Malaysia is an example of a country where farmers had a certain amount of political influence, and were therefore able to avoid excessive rent seeking by political elites, and instead obtain support from the government. The farmer group in Malaysia mainly consisted of ethnic Malays, and, even though they were not economically powerful, they were a relatively homogeneous group, and were represented in the relatively democratic government. The government represented the three main ethnic groups in Malaysia, which were also divided along professional lines. This was an important determinant for the success of the farmers, and the economy more generally, because no single interest group was able to capture majority political power and thereby act in correspondence with its own interests, at the expense

of other sectors of the economy. Hence, even though the farmers were economically weak, they were able to attain political representation of a large share of the agricultural sector due to relatively well-functioning institutions and high organizational capacity, and with this, favourable economic conditions for the large group of small-scale farmers (Abidin, 2005).

In Botswana farmers have historically enjoyed significant political influence. Pre-colonial political and economic organization in Botswana was characterized by the fact that cattle owners were central political figures. Also post-independence, cattle owners were still the most important economic interest group (Acemoglu, Johnson, and Robinson, 2003). Moreover, pre-colonial tribal institutions encouraged broad based participation in decision making and placed constraints on political elites, which contributed to well-functioning institutions. In the absence of other sectors to develop[6], early development plans focused on the rural sector. Building infrastructure and developing this sector was in the interests of the ruling political elite, since, in contrast to Ghana and Cote d'Ivoire, they did not feel threatened by political opposition, due to broad-based support and well-functioning institutions.

Turning to some Latin American experiences, a study by Nugent and Robinson (2010) compares how four Latin American countries (Columbia, Costa Rica, Guatemala and El Salvador) exploited the potential opportunities provided by the expansion of the world coffee market in the nineteenth century. In contrast to other New World countries, these four countries lacked mineral resources, while commercial activities were limited to agricultural exports, which were, however, small before the rise of coffee. The crucial difference between the four countries was the identity of their political elites. In Columbia and Costa Rica, the elite were primarily merchants, while in Guatemala and El Salvador, the elite were mainly large landowners. Hence, in Columbia and Costa Rica, the elite did not have a comparative advantage in agricultural organization, but rather in commercial activities, and therefore, at the onset of the coffee boom they chose to control (and monopolize) finance, credit provision and crop exports, while at the same time passing laws to protect smallholders which allowed them to gain land titles. In El Salvador and Guatemala, because the political elite was dominated by landowners, creating and running plantations was the more attractive option, and hence the onset of the coffee boom induced a mass land grab by powerful political elites creating large coffee plantations. In addition, the elites in Columbia and Costa Rica were more polarized and competitive than the elites in El Salvador and Guatemala, which led to a more intense struggle for political power in the former countries. In order to mobilize support among the population, the elite made concessions by, for example, introducing nascent democratic institutions and channels of representation such as elections. Specifically, the most salient type of concession in a primarily agrarian society was conceding property rights to land and passing laws to protect smallholders.

Hence, the outcome of the coffee boom was that in Columbia and Costa Rica, coffee was mainly produced by smallholders with property rights over land, while in El Salvador and Guatemala it was mainly produced on large plantations owned by a small elite group. According to Nugent and Robinson (2010), this has been an important determinant of today's large discrepancies in economic and political concentration between the countries; Columbia and Costa Rica have twice the GDP of El Salvador and Guatemala and are considerably more democratic.

The case of land reform in Korea in 1950 provides an example of changing political circumstances as the driving force of changes in political power and the distribution of economic resources. Specifically, the distribution of political power between farmers and the elite changed over a period of time, mainly due to external reasons, which eventually brought about major land redistribution. According to a study by Jeon and Kim (2000), Korean tenants represented the majority of the population in the 1940s and 1950s and they were 'monolithic' and strongly against sharecropping tenancy. As a large majority they gained strong political power under the US military administration, whose agricultural policy was (due to fear of the communist threat) in favour of tenants and against the landlords. In the 1930s, there were movements among tenants to deny rental payment and strikes against the tenancy system. This was particularly strong in regions dominated by committees (consisting of tenants and small landowners) and agricultural cooperatives. Moreover, the government was so weak in the period between 1945 and the beginning of the US military administration that landlords had no means of identifying or punishing violations of tenancy contracts. In 1948, when the new democratic government was

[6]Before diamonds were discovered, agriculture was the largest sector in the economy.

established, the threat of communism and the redistribution of land in North Korea reinforced the political power of the tenants, while the political power of the landlords became increasingly limited, and eventually land reform became inevitable.

3.2. The Importance of Land Inequality

In Kenya, farmers have been relatively well organized, and the balance of power between politicians and economic elites in Kenya has been conducive to better economic outcomes than for example that of Ghana (Acemoglu *et al*., 2007). The argument is that, in Kenya, mainly due to its legacy of white settlement in the highlands, farm sizes were larger and a landed agricultural elite was able to organize and check the power of the politicians in Nairobi. In other words, this group of farmers had low organizational costs, because it was relatively small and homogeneous, and large potential benefits, because of the large agricultural output per individual, and hence was able to overcome the collective action problem and obtain relatively strong political influence. Therefore, the group of large landowners in Kenya was able to oppose rent seeking efforts by the political elite, and hence, the taxation of agricultural export commodities has been very low. However, as the following example illustrates, the political influence of a small subgroup of farmers may still have adverse distributional effects as well as consequences for overall economic efficiency.

When Kenya entered the International Coffee Agreement, the political power of the coffee farmers was relatively strong. According to Bohman, Jarvis, and Barichello (1996), this allowed the coffee producers to capture most of the benefits of ICA quotas through a marketing scheme that provided for a producer price which was approximately equal to a weighted average of the export price. Because this led to a higher domestic producer price than the non-member market price, production exceeded the efficient level, requiring costly sales on the non-member market or storage. In response, Kenya opted for supply controls in the form of planting restrictions. This ban had regressive distributional effects because already established, wealthy coffee producers benefited from artificially high returns to coffee production. The government's choice of a planting ban rather than the use of a tax system to control output was due to the political power of coffee farmers, who sought to protect their own incomes from the decline that taxation would cause (McMahon, 1989). According to McMahon (1989), this had significant consequences for distribution and economic efficiency, as it prevented (typically poor) farmers who were not already in coffee production from entering this market and benefitting from the higher coffee prices. Hence, introducing a coffee tax, rather than a ban on production, would have likely ensured a more equal distribution of coffee rents and significantly reduced the incidence of poverty in Kenya. Therefore, in the case of coffee windfalls in Kenya, a subgroup of farmers, many of whom were from the dominant Kikuyu tribe (McMahon, 1989), were able to solve the collective action problem and obtain political influence. However, they used their political power to benefit members of the subgroup at the expense of the rest of the farming sector, and the general economy. Similar findings are obtained in a study by Banerjee *et al*. (2001), which finds that large farmers within sugar cooperatives in Maharashtra, India, are also powerful within the cooperative, and use this power to appropriate rents from smaller farmers. This effect wears off when the number of small farmers increases, because the power of the small farmers increases in their number.

While Kenya has been relatively successful compared to Ghana, since Kenya did not kill its cash cow, comparing the Kenyan experience to that of Malaysia reveals that it is far from optimal. Farmers have had relatively significant political power in both Kenya and Malaysia, and hence they have been able to prevent rent seeking by political elites and instead obtain support from the government. However, while this has benefited the large group of relatively poor, rural smallholders and contributed positively to general economic development in Malaysia, it has mainly benefited the small group of wealthy large-scale farmers in Kenya, which has had adverse effects regarding distribution and efficiency. The key to these two different outcomes seems to be, first, that while farmers in Malaysia were politically strong, they did not have monopoly political power, since the Chinese and the Indians, both groups representing other sectors of the economy, were equally represented in the government. And, more importantly, the agricultural sector as a whole was represented politically in Malaysia, and hence the entire rural population benefited from government support. In Kenya, large landowners, and in the specific case of the ICA, the coffee producers, had a disproportionately large power share, and hence they were able to influence policy in their favour at the expense of other rural groups and the rest of the economy.

Mauritius is another example of a country where export agriculture (sugar cane) has been supported by

the central government rather than taxed. According to Subramanian and Roy (2003), the success of the Mauritian sugar cane sector is due to optimal rent sharing between economic and political elites which were represented by different ethnic groups. The main economic resource in Mauritius is sugar cane, but the sugar producers did not have majority political power, which instead was held by the French minority. The structure of Mauritian diversity and ethnic fragmentation can be compared to that of Malaysia, and is central to Mauritius's economic success (Subramanian and Roy, 2003). According to Meisenhelder (1997), a subdivision of sugar estates took place in Mauritius, beginning in the late 19th century, which reduced the number of sugar plantations and changed the distribution of land, creating a 'landowning proletariat', which was the historical foundation of an eventual indo-Mauritian middle class of successful farmers, civil servants and educated professionals. Moreover, the state bureaucracy, which was disconnected by historical circumstances from landowners, taxed the sugar profits, and hence avoided the concentration of agricultural rents among wealthy planters. This is an important reason for the level of development and relative equality in Mauritius today.

3.3. Social Homogeneity and Collective Action

In addition to land inequality, group heterogeneity can also affect the costs of collective action. For example, several studies have suggested that heterogeneity increases the cost of organizing because more heterogeneous populations tend to have less trust and larger potential for conflict. The following section briefly presents some studies on the relationship between homogeneity and collective action.

A study by O'Rourke (2007) finds that the success of Danish farmers, with respect to cooperation in the decades before WWI, was due to the fact that they were extremely homogeneous, ethnically, religiously and linguistically, and had no conflict over land. Moreover, an empirical study by Grootaert (1999) finds that the highest participation in collective action comes from members of organizations which are internally more homogeneous. The results of this study indicate that kin group and religion are key dimensions, i.e. collective action is easiest in associations which bring together people from within the same kin group and/or religion. Since the ability to organize collective action is a function of trust and a shared perception of a common good, it seems plausible that this is more likely to be achieved among people who are more homogeneous. This implies that if a sector consists of a large homogeneous group with a high degree of trust, it will be more effective in obtaining political influence than a sector consisting of many small, fragmented groups.

Relating this directly to one of the case examples presented above, a study by Easterly and Levine (1997) explains the excessive taxation of cocoa in Ghana in terms of ethnic divisions. According to this study, the experience with cocoa in Ghana illustrates how ethnic conflict over economic rents adversely affects policy choices. In Ghana, the production of cocoa has been concentrated in the region of the minority Ashanti group (making up 13 per cent of the population). The Ashanti Empire was dominant in pre-colonial times, to the resentment of other groups, such as the coastal Akan groups (making up 30 per cent of the population). President Nkrumah, himself from one of the Akan groups, froze the producer price of cocoa in the 1950s, and, since the Ashanti based opposition party failed to prevent this, continued to tax cocoa heavily through the Cocoa Marketing Board and through the overvaluation of the official exchange rate. Though ethnic coalitions 'rotated with dizzying speed' through the 1970s and early 1980s, they all seemed to agree on the punitive taxation of cocoa, enabling the dissipation of these rents to political and ethnic supporters.

Easterly and Levine (1997) also relate the success of Botswana to its ethnically homogeneous population, while according to Miguel, Gertler, and Levine (2005), Indonesia has a high degree of ethnic fragmentation, which could be one reason for the failure of smallholder farmers to organize and obtain political influence in order to keep some of the rents created in agriculture.

3.4. Summary and Main Factors

The above examples suggest that the key determinants of the distribution of agricultural windfalls are a combination of the organizational structure, and institutional factors such as political stability and political competition. The combination of these factors defines the relative costs and benefits of organization and political influence by different groups.

For example, in Ghana and Cote d'Ivoire political instability created incentives for elites to excessively redistribute rents, while smallholder farmers were

unable to organize and prevent this rent appropriation. However, as the example of Kenya illustrates, large inequalities in land may contribute to overcoming this collective action problem. But while a situation in which a subgroup of farmers are politically influential may reduce the inefficiencies associated with rent seeking from agriculture, it may have significant redistributive consequences resulting in large inequalities within the farmer population, as also illustrated by the examples of Guatemala and El Salvador. The analysis suggests that the most successful outcomes in the event of agricultural windfalls, appears in countries where a large share of the farming sector is represented politically, as in Malaysia, Mauritius and Korea, thereby avoiding the redistribution of rents among political elites as well as by large landowners, and hence ensuring a more diffuse spread of resource rents. Lastly, the examples of Columbia, Costa Rica and Botswana illustrate the importance of institutional quality and, specifically, political competition and political stability.

Hence, what seems to be crucial for the dispersion of rents in the event of windfalls in agriculture is a combination of the following: (1) the ability of farmers to organize and hence the extent of their political influence, (2) the extent to which political influence is obtained by a large group of small scale farmers or a small subgroup of large landowners, (3) the extent of political competition and political stability.

Tables **1** and **2** summarize the findings in this section. We see from Table **2** that if farmers are organized as a whole and there is political stability and political competition, then there is little or no rent seeking in agriculture. If farmers are not organized at all, and there is political competition, or, if only a subgroup of farmers is organized and there is political stability, then there is no rent seeking in agriculture either. However, if farmers are not organized and there is no political stability, then political elites will appropriate agricultural rents, and, if only a subgroup of

Table 1: Summary of Country Examples

Country	Crop	Ex ante situation	Ex post situation
Indonesia	Coffee, palm oil	Low organizational capacity of farmers / conflict over land	Rent seeking – unequal distribution of rents
Ghana/Cote d'Ivoire	Coffee, cocoa	Relatively equal distribution of land, low organizational capacity of farmers, political instability	Rent seeking by political elites and unequal distribution of rents
Kenya	Coffee	Unequal land distribution and strong political power of large scale farmers	Rent seeking by large scale farmers and relatively unequal distribution of rents
Guatemala/El Salvador	Coffee	Relatively equal distribution of land, political elite were large scale farmers, no political competition	Rent seeking (land grabbing)
Malaysia	Palm oil	Equal distribution of land, organized smallholders, political competition and stability	No rent seeking
Mauritius	Sugar	Relatively equal land distribution, political competition and some political influence of farmers	No rent seeking
Columbia/Costa Rica	Coffee	Relatively equal distribution of land, political elite had no experience with farming, political competition	No rent seeking
Botswana	Cattle	Wealthy farmers were politically powerful, well functioning institutions, political stability	No rent seeking

Table 2: Summary of Country Examples by Most Important Determinants

Country	Farmers organized as a whole	Subgroup of farmers	Political stability	Political competition	Rent seeking
Indonesia	No	No	-	-	High
Ghana	No	No	No	-	High
Kenya	No	Yes	-	-	Medium
Guatemala/El Salvador	No	Yes	No	No	High
Malaysia/Mauritius/Korea	Yes	No	Yes	Yes	Low
Botswana	No	Yes	Yes	-	Low

farmers is organized, and there is no political stability or political competition, then large-scale farmers will appropriate rents from small-scale farmers.

Hence, what we can conclude from the above examples is that if a broad section of small-scale farmers have political influence, either directly *via* a somewhat well-functioning democratic system or because they are able to organize and pose a significant threat to the incumbent regime, they will be able to obtain a large share of agricultural rents. In addition, even if small-scale farmers are not able to organize and obtain political influence, the existence of well-functioning institutions and political stability (Botswana) or political competition (Columbia and Costa Rica) may ensure smallholders' access to agricultural rents, because political stability prevents incentives for excessive rent seeking among political elites, and political competition among elites provides smallholders with political influence indirectly, as political elites become dependent on their support.

These conclusions correspond well with the proposed theoretical analysis presented in section 2, which suggested that a high level of social heterogeneity increases the costs of organization for the farmers, possibly to the extent where they are unable to organize, leading to a situation where all of the rents are appropriated by the elite. Moreover, a low level of inequality within the farmer group, corresponding to a large n in the model, is an advantage in the case where farmers choose to organize, ultimately giving them a larger share of the economic rents as well as political power. In addition, high quality institutions (e.g. in the form of political competition and stability), represented by s in the model, decreases the costs of organizing as well as increasing the benefits. In other words, higher quality institutions increase the probability that farmers will obtain political power and a larger share of the economic rents.

4. CONCLUSION

This study has suggested that political and economic power is interdependent in weakly institutionalized countries, so that, in countries where economic concentration is high, political concentration also tends to be high. This could be explained by the fact that in unindustrialized countries with weak institutions, the majority of the economic wealth tends to come from natural resources, and political power provides access to natural resource rents. At the same time, a wealthy group of elites is able to use its wealth to obtain political power. This creates a stable equilibrium of a high concentration of political and economic power. However, since this relationship tends to be stronger when the natural resources a country is endowed with are more appropriable, increasing agricultural prices have the potential to change this equilibrium, because they change the composition of natural resource endowments so that it is to a larger extent characterized by less appropriable natural resources. Specifically, increasing agricultural prices create a situation where a larger share of the population benefits from the natural resource rents.

However, if farmers are too fragmented and disorganized, the higher land rents could instead be appropriated by the political elite. In this case, high-value arable land would not be much different from conventional point source natural resources, with the adverse distributional and efficiency consequences that this implies.

Inequality in land may to some extent circumvent this problem, since it creates a subgroup of wealthy landowners who have lower costs and larger benefits from collective action, and hence a higher probability of obtaining political influence. Some studies have indeed suggested that in areas with high land inequality, political concentration is lower and economic outcomes are better than in areas with more equality in land. On the other hand, other case examples have shown that subgroups of large-scale farmers with significant political influence may use their power to appropriate rents from small-scale farmers in order to increase their economic power.

The theoretical framework developed in this study, as well as the empirical examples presented, suggests that the necessary conditions for avoiding excessive rent seeking by political or landed elites, is that the entire farming sector is politically represented, or, that institutions are well-functioning and the political system is characterized by political competition and stability. This is not a promising conclusion, as many land-abundant African countries that may experience increasing agricultural windfalls in the future, do not seem to have either. This implies that it is important to strengthen formal institutions such as property rights and land tenure security, or those which regulate the political system. While such formal institutional development is a slow and difficult process, it may be more fruitful to invest in the more informal institutions of smallholder organization. However, as the conclusions

from this study suggest, it is important that such informal organizations are able to coordinate and form large and inclusive organizations, which represent as large a share of the farming sector as possible.

Several micro-studies have documented direct benefits of investments in such informal agricultural organizations. For example, cooperatives in Ethiopia have increased farmers' bargaining power regarding the marketing of outputs, access to credit and inputs at cheaper prices (Rodrigo, 2012), while coffee cooperatives in Ethiopia have provided greater profits to coffee farmers than private traders (Kodoma, 2007). Moreover, village organizations in Burkina Faso and Senegal have been shown to be effective (Bernard *et al*., 2008). However, since these organizations are all at the local level, they may not benefit the organizational capacity of the entire sector. Indeed, they may in fact do the opposite if the process results in many disorganized organizations as this may potentially increase conflicts over land and resources. In the language of social capital, 'bonding' social ties may not be worth much without 'bridging' and 'linking' ties to ensure the cohesiveness of the larger group and effective links to the political arena. More research is needed to gain a better understanding of the relationship between effective local village organizations and the capacity of the entire agricultural sector to work together and obtain political influence.

REFERENCES

Abidin, Mahani Z. 2005. "Competitive Industrialization with Natural Resource Abundance: Malaysia." Pp. 147-64 in *Resource Abundance and Economic Development*, edited by R.M. Auty. Oxford University Press.

Acemoglu Daron and James A. Robinson. 2001. "A Theory of Political Transitions." The American Economic Review 91(4):938-63. http://dx.doi.org/10.1257/aer.91.4.938

Acemoglu, Daron, James A. Robinson and Ragnar Torvik. 2013. "Why do Voters Dismantle Checks and Balances?" Centre for Applied Macro - and Petroleum Economics (CAMP). Working Paper No. 1/2013. http://dx.doi.org/10.1162/154247604323067916

Acemoglu, Daron, James A. Robinson and Thierry Verdier. 2004. "Kleptocracy and Divide-and-Rule: a Model of Personal Rule." Journal of European Economic Association 2:162-92.

Acemoglu, Daron, Maria A. Bautista, Pablo Querubin and James A. Robinson. 2007. "Economic and Political Inequality in Development: the Case of Cundinamarca, Columbia." NBER Working Paper Series. Working Paper 13208.

Acemoglu, D., S. Johnson and J.A. Robinson. 2003. "An African Success Story: Botswana." Pp. 80-119 in *In Search of Prosperity,* edited by D. Rodrik. Princeton University Press.

Arndt, Channing, Rui Benfica, Finn Tarp, James Thurlow, and Rafael Uaiene. 2009. "Biofuels, poverty and growth: a computable general equilibrium analysis of Mozambique." Environmental and Development Economics 15:81-105. http://dx.doi.org/10.1017/S1355770X09990027

Banerjee, Abhijit, Dilip Mookherjee, Kaivan Munshi and Debraj Ray. 2001. "Inequality, Control Rights, and Rent Seeking: Sugar Cooperatives in Maharashtra." Journal of Political Economy 109(1):138-90. http://dx.doi.org/10.1086/318600

Bates, Robert and Steven Block. 2008. "Political Economy of Agricultural Trade Interventions in Africa." Agricultural Distortions Working Paper 86. World Bank.

Bates, Robert. 1981. *Markets and States in Tropical Africa.* University of California Press.

Bernard, Tanguy, Marie H. Collion, Alain de Janvry, Pierre Rondot and Elisabeth Saddoulet. 2008. "Do Village Organizations make a Difference in African Rural Development? A Study for Senegal and Burkina Faso." World Development 36(11):2188-204. http://dx.doi.org/10.1016/j.worlddev.2007.10.010

Boschini, Anne D., Jan Pettersson and Jesper Roine. 2007. "Resource Curse or not: a Question of Appropriability." Scandinavian Journal of Economics 109:593- 617. http://dx.doi.org/10.1111/j.1467-9442.2007.00509.x

Bulte, Erwin H., Richard Damania and Robert T. Deacon. 2005. "Resource Intensity, Institutions, and Development." World Development 33(7):1029-44. http://dx.doi.org/10.1016/j.worlddev.2005.04.004

Cardenas, Mauricio. 1994. "Stabilization and Redistribution of Coffee Revenues: a Political Economy Model of Commodity Marketing Boards." Journal of Development Economics 44:351-80. http://dx.doi.org/10.1016/0304-3878(94)90048-5

Conning, Jonathan H. and James A. Robinson. 2007. "Property Rights and the Political Organization of Agriculture." Journal of Development Economics 82:416-47. http://dx.doi.org/10.1016/j.jdeveco.2005.08.001

Dalgaard, Carl-Johan and Ola Olsson. 2008. "Windfall Gains, Political Economy and Economic Development." Journal of African Economies 17:72-109. http://dx.doi.org/10.1093/jae/ejm033

de Luca, Giacomo, Anastasia Litina and Petros G. Sekeris. 2012. "Growth-Friendly Dictatorships." Center for Research in the Economics of Development, Working Paper 1209. University of Namur.

Deininger, Klaus, Derek Byerlee, Jonathan Lindsay, Andrew Norton, Harris Selod and Mercedes Stickler. 2011. "Rising Global Interest in Farmland: can it Yield Sustainable and Equitable Benefits?" Agriculture and Rural Development Series. The World Bank.

Easterly, William and Ross Levine. 1997. "Africa's Growth Tragedy: Policies and Ethnic Divisions." The Quarterly Journal of Economics 112(4):1203-50. http://dx.doi.org/10.1162/003355300555466

Fold, Niels and Lindsay Whitfield. 2012. "Developing a Palm Oil Sector: the Experiences of Malaysia and Ghana Compared." DIIS Working Paper 2012:08. Danish Institute of International Studies.

Goldstein, Markus and Christopher Udry. 2008. "The Profits of Power: Land Rights and Agricultural Investment in Ghana." Journal of Political Economy 116(6):981-1022. http://dx.doi.org/10.1086/595561

Grootaert, Christiaan 1999. "Social Capital, Household Welfare and Poverty in Indonesia." Local Level Institutions, Working Paper 6. The World Bank.

Guimaraes, Bernardo and Kevin D. Sheedy. 2012. "A Model of Equilibrium Institutions." CEPR Discussion Paper DP8855. Center of Economic Policy Research.

Isham, Jonathan, Michael Woolcock, Lant Pritchett and Gwen Busby. 2005. "The Varieties of Resource Experience: Natural Resource Export Structures and the Political Economy of

Economic Growth." The World Bank Economic Review 19(2):141-74. http://dx.doi.org/10.1093/wber/lhi010

Jarvis, Lovell S. 2005. "The Rise and Decline of Rent-Seeking Activity in the Brazilian Coffee Sector: Lessons from the Imposition of Removal of Coffee Export Quotas." World Development 33(11):1881-1903. http://dx.doi.org/10.1016/j.worlddev.2005.06.003

Jeon, Yoong D. and Young Y. Kim. 2000. "Land Reform, Income Distribution, and Agricultural Production in Korea." Economic Development and Cultural Change 48(2):253-68. http://dx.doi.org/10.1086/452457

Kodoma, Yuka. 2007. "New Role of Cooperatives in Ethiopia: the Case of Ethiopian Coffee Farmers Cooperatives." African Study Monographs 35:87-108.

Markussen, Thomas and Finn Tarp. 2011. "Political Connections and Investments in Rural Vietnam." UNU-WIDER Working Paper 2011/37. United Nations University, World Institute for Development Economics Research.

Matondi, B.P., K. Havnevik and A. Beyene. 2011. *Biofuels, Land Grabbing and Food Security in Africa.* Zed Books**.**

McCarthy, John F. 2010. "Processes of Inclusion and Adverse Incorporation: Oil Palm and Agrarian Change in Sumatra, Indonesia." The Journal of Peasant Studies 37(4):821-50. http://dx.doi.org/10.1080/03066150.2010.512460

McMahon, Gary. 1989. "The Income Distribution Effects of the Kenyan Coffee Marketing System." Journal of Development Economics 31:297-326. http://dx.doi.org/10.1016/0304-3878(89)90016-3

Meisenhelder, Thomas. 1997. "The Developmental State of Mauritius." The Journal of Modern African Studies 35:279-97. http://dx.doi.org/10.1017/S0022278X97002383

Miguel, Edward, Paul Gertler and David I. Levine. 2005. "Does Social Capital Promote Industrialization? Evidence from a Rapid Industrializer." The Review of Economics and Statistics 87(4):754-62. http://dx.doi.org/10.1162/003465305775098099

Nugent, Jeffrey B. and James A. Robinson. 2010. "Are Factor Endowments Fate?" Journal of Iberian and Latin American Economic History 28:45-82. http://dx.doi.org/10.1017/S0212610909990048

Obidzinski, K.R., A.H. Komarudin and A. Andrianto. 2012. "Environmental and Social Impacts of Oil Palm Plantation and their Implications for Biofuel Production in Indonesia." Ecology and Society 17(1):25. http://dx.doi.org/10.5751/ES-04775-170125

Oechslin, Mauel. 2010. "Government Revenues and Economic Growth in Weakly Institutionalized States." The Economic Journal 120(545):631-50. http://dx.doi.org/10.1111/j.1468-0297.2009.02349.x

O'Rourke, Kevin. 2007. "Culture, Conflict and Cooperation: Irish Dairying before the Great War." The Economic Journal 117:1357-79. http://dx.doi.org/10.1111/j.1468-0297.2007.02086.x

Osei, Robert. 2005. "A Growth Collapse with Diffuse Resources: Ghana." Pp. 165-78 in *Resource Abundance and Economic Development***,** edited by R.M. Auty. Oxford University Press.

Persson, Torsten, Gerard Roland and Guido Tabellini. 1997. "Separation of Powers and Political Accountability." The Quarterly Journal of Economics 112(4):1163- 202. http://dx.doi.org/10.1162/003355300555457

Robertson, Beth and Per Pinstrup-Andersen. 2010. "Global Land Acquisition: Neo- Colonialism or Development Opportunity?" Food Security 2:271-83. http://dx.doi.org/10.1007/s12571-010-0068-1

Robinson, James A. 2001. "When is a State Predatory?" CESifo Working Paper 178, CESifo Group Munich.

Rodrigo, Maria F. 2012. "Do Cooperatives Benefit the Poor? Evidence from Ethiopia." 2012 Annual Meeting, August 12-14, 2012, Seattle, Washington, Paper No. 124388, Agricultural and Applied Economics Association.

Ross, Michael L. 2001a. "Does Oil Hinder Democracy?" World Politics 53(3):325-61. http://dx.doi.org/10.1353/wp.2001.0011

Ross, Michael L. 2001b. *Timber Booms and Institutional Breakdown in Southeast Asia.* Cambridge University Press. http://dx.doi.org/10.1017/CBO9780511510359

Subramanian, Arvind and Devesh Roy. 2003. "Who can Explain the Mauritian Miracle?" Pp. 205-43 in *In Search of Prosperity*, edited by D. Rodrik. Princeton University Press.

Willebald, Henry. 2011. "Natural Resources, Settler Economies and Economic Development During the First Globalization: Land Frontier Expansion and Institutional Arrangements". PhD dissertation, Universidad Carlos III de Madrid, Departemento de Historica Economica e Instituciones.

Received on 05-08-2013 Accepted on 25-09-2013 Published on 28-10-2013

DOI: http://dx.doi.org/10.6000/1929-7092.2013.02.26