Food and Power: Authoritarian Regime Durability and Agricultural Policy

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Dedication

I dedicate this dissertation to my wife Kalani, without whom I would not have entered graduate school at the University of Minnesota and been able to share with her this fun, fascinating and productive phase of my life.

Abstract

The agricultural policies chosen by autocratic governments have a significant effect on authoritarian regime durability. They do so by helping these governments resolve distributional conflicts between farmers and food consumers, and co-opt threatening elite factions and groups within society at large. In this dissertation, I make the case that authoritarian regime durability and agricultural policy are linked in a feedback loop: policy is made in response to political threats, and goes on to have a significant mitigating effect on these threats and contribute to the durability of authoritarian regimes. I argue that, contrary to established wisdom, agricultural policy-making under authoritarian regimes is as much about placating rural elites as it is about providing cheap food for the urban masses. I use case studies to show that authoritarian leaders such as Chancellor Bismarck in 1870s Germany and Tun Abdul Razak in 1970s Malaysia have used rural-biased policies which increase the price of food to co-opt rural elites and prevent authoritarian regime instability. I use cross-national statistical analysis to show that after accounting for the threats of rural elites, long-standing findings on the pervasiveness of urban bias under authoritarianism need to be amended in order to account for the possibility of rural-biased agricultural policies under governments facing political threats from rural elites.

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Chapter 1

Introduction

The agricultural policies chosen by autocratic governments have a significant effect on authoritarian regime durability. They do so by helping these governments resolve distributional conflicts between farmers and food consumers, and co-opt threatening elite factions and groups within society at large. This is the central empirical finding presented in this dissertation, and a novel contribution to the growing Political Science literature on democratization and comparative authoritarianism, which has not sufficiently explored the political economy of agricultural market distortions under autocratic governments. In what follows, I make the case that authoritarian regime durability and agricultural policy are linked in a feedback loop: policy is made in response to political threats, and goes on to have a significant mitigating effect on these threats and contribute to the durability of authoritarian regimes. I argue that, contrary to established wisdom, agricultural policy-making under authoritarian regimes is as much about placating rural elites as it is about providing cheap food for the urban masses. I show that authoritarian leaders such as Chancellor Bismarck in 1870s Germany and Tun Abdul Razak in 1970s Malaysia have used rural-biased policies which *increase* the price of food to co-opt rural elites and prevent authoritarian regime instability. This is a novel finding, given that previous scholars have focused on the policies of authoritarian governments in countries such as Egypt and Ghana which have sought to placate urban consumers by *decreasing* the price of food (Bates, 1983; Gutner, 2002). After accounting for the threats of rural elites I show that such long-standing findings on the pervasiveness of urban bias under authoritarianism need to be amended in order to account for the possibility of rural-biased agricultural policies under these types of governments.

Authoritarian regimes are those under which the government is not selected directly or indirectly by the population through contested elections.¹ Therefore, not all regimes with contested elections—that is, elections which are run fairly and in which opposition parties stand a chance of victory—are democracies, because although a legislature is selected through elections, the government is not. In fact, many of the regimes referred to as 'anocracies' by Marshall and Cole (2011) and all of the 'electoral' authoritarian regimes outlined by Schedler (2002, 2006) follow this pattern of elections without democracy.² The Imperial German regime studied at length in this dissertation is a good example: Although competitive elections were held for the Imperial legislature, the Reichstag (Anderson, 2000), the Kaiser and his cabinet were not elected by this body. However, not all regimes which allow for the selection of the government by elections are democracies, because not all elections are competitive. Where opposition parties do not stand a chance of winning elections—whether due to electoral fraud, manipulation of the electoral system, violence, intimidation or collusion by incumbent parties—we must speak of an authoritarian regime. The Malaysian case included in this dissertation is a good illustration of this point: although relatively fair elections have been held in the country since independence with a broad suffrage (Case, 1996), collusion among the dominant political parties has effectively eliminated the chance of opposition electoral victory and led to an unbroken period of government under the United Malay National Organization. Although the case studies included in this dissertation are both 'electoral' authoritarian regimes, my analysis is not limited to this regime type; in cross-national statistical analysis I look at the relationship between agricultural policy and regime stability across all types of authoritarian regimes. Explaining authoritarian regime durability is an important task for students of comparative

¹ I thus take a minimalist, or procedural, conception of democracy in this dissertation and define the set of authoritarian regimes to be studied as those which do not fulfil these procedural criteria of democratic accountability. In cross-national analysis I use the datasets by Marshall and Cole (2011) and Geddes, Wright, and Frantz (2012) for details on regime type. I use the terms 'authoritarian regime', 'autocracy' and 'dictatorship' interchangably to denote this set of regimes. See (Przeworski et al., 2000), Svolik (2012, 22-23) Dahl (1971), Schumpeter ([1942] 1962) and Schmitter and Karl (1991) for explanations and other uses of this conception of authoritarianism.

 $^{^2}$ In comparative politics there is a voluminous literature on the role of elections under authoritarianism. See Section 1.1 for more information.

politics. In the last twenty-five years the number of democratic polities in the world increased dramatically, from thirty to ninety-five. Events such as the dissolution of the Soviet Union and the collapse of authoritarian governments in Latin America and Eastern Europe, appeared to some observers in the 1990s to have ushered in an irresistible, global wave of democratization (Huntington, 1991). However, these hopes proved somewhat premature, as many remaining undemocratic regimes have proven remarkably resistant to reform, leaving 70 of a total of 165 contemporary governments not democratically accountable to their populations (Marshall and Cole, 2011, 12). These remaining authoritarian regimes are an important topic for political science research, because aside from curtailing civil liberties, undemocratic governments have been found to behave differently to their democratic counterparts in areas as diverse as the initiation of international conflicts (Russett and Oneal, 2001), trade policy (Mansfield, Milner, and Rosendorff, 2000) and public spending (Ross, 2006). Despite these significant empirical differences, the politics of authoritarian regimes were for a long time something of a gray area, poorly understood by political scientists in comparison to those of democratic governments. In the last fifteen years, this gap has been addressed as undemocratic regimes have become the object of expanding research interest. Rather than distinguishing simply between democratic and authoritarian regimes, scholars now explicitly look for variation among non-democratic governments to explain why some types of regimes are significantly more durable than others.

However, scholars are still only beginning to understand the political economy of authoritarian regimes. In fact, the determinants and effects of economic policy under these types of governments have been surprisingly overlooked in the new literature on comparative authoritarianism. Research has yet to develop a nuanced understanding of how authoritarian politics affects the development process, and therefore how undemocratic politics affects the well-being of the world's population. In addition, more work is needed to systematically explore the circumstances under which economic policy can lead to authoritarian regime durability, that is, to determine the extent to which dictators can prolong their tenure in power through state intervention in markets.

These gaps in contemporary research represent a chance for political science research to make new contributions to the study of development, democratization and regime change. The fundamental insight of the new literature on authoritarianism—that scholars need to pay attention to the consequences of variation *among* non-democratic governments, and to the capacity of authoritarian leaders to cement their own positions in power—has proven powerful within the discipline, leading to important theoretical and empirical insights. We now know that authoritarian elites' varying incentive structures lead to variation in their tenures: military regimes are significantly more likely to collapse than one-party regimes, for example, because officers—in contrast to party functionaries—always have the option of returning to the barracks with their careers intact (Geddes, 1999; Lai and Slater, 2006). However, scholars of comparative authoritarianism still need to identify the types of variation in authoritarian leaders' incentive structures which matter for economic policy, and to draw out their consequences for policy outcomes and regime survival.

In this dissertation, I take up this task with a specific focus on agricultural policy. My approach follows that of other scholars of authoritarian regimes and assumes that politicians who are not democratically elected care, first and foremost, about their personal survival, and thus remaining in power (Svolik, 2012). They therefore seek to address political *threats* to their governments. I examine what the socio-economic and institutional power bases for the threats of food producers and consumers are, and under which circumstances their threats are credible. I then ask how threats emanating from these groups can be co-opted by authoritarian regimes through agricultural policy, and discuss what the broader consequences of these policies are for development and regime stability.

Regime Type (Geddes)	Urban/Rural Bias	Effect of Ag. Policy	Example
Militowa	Urban-Biased	Decrease Prices	Thailand
Military	Rural-Biased	Increase Prices	Chile
Party	Urban-Biased	Decrease Prices	China
raity	Rural-Biased	Increase Prices	Malaysia
Personal	Urban-Biased	Decrease Prices	Egypt
reisonai	Rural-Biased	Increase Prices	

Table 1.1: Rural- and Urban-Biased Dictatorships in Comparative Perspective

What emerges from my analysis is an economic typology of authoritarian regimes—urbanbiased and rural-biased—which cuts across previous scholars' attempts to characterize types of regime according to their institutional features. Autocratic governments which rule over highly urbanized societies face greater political threats from food consumers and address these through lower food prices, while those which rule over polities dominated by rural elites address their threat via policies which increase the price of food and agricultural produce. As I illustrate using Geddes' (1999) influential typology in Table 1.1,³ whether a regime is a military, party-based or personalist dictatorship does not determine its agricultural policy choices—socio-economic threat structures exogenous to these institutional factors do. However, the choices made in agricultural and food policy have a significant effect on regime durability which has not been explored by previous scholars of authoritarianism. My research uncovers a critical and overlooked economic cleavage in developing autocracies, that between the city and the countryside, which has important consequences for development and the durability of authoritarian rule.

1.1 Previous Literature and an Approach to Economic Policy-Making Under Authoritarianism

It is puzzling that the contemporary literature which seeks to 'unpack' authoritarian regimes and look at diversity among undemocratic governments has neglected to analyze economic policy, because the canonical literature on regime change has as its foundation the strong correlation between development and democratization. From early studies like that by Lipset ([1959] 1963) through more recent work by Boix and Stokes (2003), political scientists have found that countries with higher levels of national income are more likely to undergo a democratic transition. An influential literature follows this economic approach but views political institutions as the result of a struggle between economic groups with divergent interests over redistribution (Acemoglu and Robinson, 2006; Boix, 2003) or property rights (Ansell and Samuels, 2010, 2012). Unwilling to limit their analysis to domestic politics, scholars have also looked at the implications of international financial integration (Freeman, Hays, and Nesseth, 2003; Freeman and Quinn, 2012) and international trade (Ahlquist and Wibbels, 2012) for authoritarian rule and democratization.

However, in contrast to the literature on which it builds, the new wave of research on the politics of authoritarian regimes has paid only scant attention to economics and economic policy. To illustrate, one need look no further than the Geddes (1999) article which is

 $^{^{3}}$ I engage a wider range of existing typologies in Section 1.5.

regarded as having sounded the starting gun for the subsequent race into authoritarian regimes research. Pointing out that different forms of authoritarianism exist and tend to break down in systematically different ways, she mounts a veiled but determined attack on economic theories of democratization. Introducing a new categorization of authoritarian regimes as personalist, military, single-party or amalgams, she goes on to see the roots of their demise in the interests and incentive structures of these different types of governments. Although she examines the varying effects of economic crises on each regime type (ibid., 138-140), Geddes does not engage the positive correlation between wealth and democracy which she nonetheless concedes has been established beyond doubt by "modernization theory" (ibid., 118). The reader therefore does not learn which types of regime are more likely to be immune to rent-seeking and more likely to deliver economic growth, for example, although these regimes should be significantly more likely to experience a democratic transition.

Geddes' snub of the literature linking development to democratization has been reflected in subsequent studies taking up her call to explore the ways "different kinds of authoritarianism differ from each other as much as they differ from democracy" (ibid., 121).⁴ Research has tended to focus on non-economic features of authoritarian regimes and their effects on regime durability. Milan Svolik (2009, 2012), for example, models the problem of power-sharing between an authoritarian leader and their ruling coalition, finding that two equilibria emerge: contested dictatorships in which coups occur frequently, and established dictatorships in which leaders cannot be credibly removed by coups. The effect of political institutions on authoritarian regime durability has drawn a great deal of attention by scholars, with a consensus that 'electoral' or 'competitive' authoritarian regimes make up a large and important group of robust contemporary dictatorships (Levitsky and Way, 2010; Schedler, 2006; Morse, 2012). Lisa Blaydes (2011), for example, has shown how holding elections was an important part of the Mubarak regime's survival strategy in Egypt, as they helped resolve potentially destabilizing distributional conflicts among elites. In a previous paper, I have shown how the manipulation of the electoral system through systematic malapportionment favoring German-speaking elites was part of the Austrian regime's strategy to placate urban voters demanding suffrage reform before World War One (Thomson,

 $^{^4}$ Geddes extends her criticism of the 'modernization' literature to the redistributivist school in a subsequent article (Geddes, 2007).

2013). Gandhi and Przeworski (2007) argue that legislatures under authoritarianism are an important mechanism for co-opting rival groups, and show that such institutions have a significant positive impact on regime durability. Magaloni (2006, 2008) has shown that political parties assist dictators in committing to power-sharing arrangements with their ruling coalitions and mobilizing their own supporters, and thus prolong their tenure, as in the case of the Mexican Institutional Revolutionary Party (PRI). Dan Slater (2003, 2010) has investigated how a broader set of institutions, including ruling parties and the bureaucracy but also coercive institutions such as the police force and military, were combined by some South-East Asian regimes in a form of state strength which contributed to their durability.

The major theoretical innovation of this literature is that it has moved beyond the determinism implied in economic approaches to authoritarianism and regime change, which assume that changes in socio-economic structures cause democratization. Research in comparative authoritarianism highlights the capacity of autocratic leaders to shape their chances of survival regardless of a country's level of development and associated factors, taking a more agent-centered approach to regime durability.⁵

However, this agent-centered approach has not extended to economic policy. Work on the political economy of authoritarian regimes remains relatively under-developed. On the one hand, scholars have made several important findings on economic differences *between* democracies and dictatorships. Democratic institutions, which provide for secure property rights and constraints on the power of the executive, have been found to be important determinants of long-run economic development (Acemoglu, Johnson, and Robinson, 2001, 2002). Democratic governments have been round to allow for less rent-seeking, corruption and inefficiency and thus promote growth (Mohtadi and Roe, 2003). Testing the famous theoretical proposition that democratic governments should be more responsive to poor citizens (Meltzer and Richard, 1981), research has found that authoritarian regimes spend less on primary education (Ansell, 2008) and health (Ross, 2006), and are less effective in translating economic growth into positive social outcomes such as increased caloric intake (Blaydes and Kayser, 2011) and lower child mortality rates (Gerring, Thacker, and Alfaro,

⁵ Of course, similarly agent-centered accounts to democratic reform were also present in earlier generations of the democratization literature, particularly that examining transitions in Latin America in the 1980s (O'Donnell, Schmitter, and Whitehead, 1986; Przeworski, 1991).

2012).

On the other hand, scholars have been less effective in highlighting and explaining economic differences among authoritarian regimes. Although Acemoglu and Robinson (2006, 287-320) argue that authoritarian elites implement redistributive policies which vary in order to mitigate citizens' incentives to revolt against their regime, the burden of taxation, and benefits from redistribution, do not change across or within sectors in their model but only across factors of production. Wintrobe (1990, 1998), for example, develops an economic theory of dictatorship in which he distinguishes between different types of dictator, tin-pots and totalitarians, and draws consequences from these two types for responses to economic change and for regime durability. As enlightening as this analysis is, because he makes assumptions about the motives of each type of dictator without providing empirical grounds for including any regime in either category, it is impossible to use his framework to construct testable hypotheses on whether a given leader will behave to maximize their personal wealth (the tinpot) or to maximize their power over the population (the totalitarian). Gandhi and Przeworski (2006) develop a general model in which authoritarian governments need to set policy to prevent rebellion, promote cooperation in the economy and thus generate rents which they redistribute to remain in power. However, this approach does not allow for divisions within the opposition demanding policy concessions, for example between sectors or between consumers and producers within sectors. The resulting perspective, which looks only at the relative utilities of a dictator and their opposition, and not at winners and losers outside of the ruling elite, is an incomplete picture of economic policy under authoritarianism.

One area where research on the political economy of authoritarianism has found significant differences among authoritarian regimes is that addressing the correlation between natural resource wealth and regime durability. Smith (2004) finds that authoritarian regimes which rule over economies with greater oil production are less likely to collapse, Ulfelder (2007) confirms this finding for the more general case of resource rents, while Haber and Menaldo (2011) find no correlation between resource reliance and authoritarianism. Bueno de Mesquita and Smith (2009) examine the provision of public goods by governments in the face of revolutionary threats, and find a higher likelihood of repressive authoritarianism in countries enjoying greater natural resource rents. However, the resource curse literature

does not seem well suited to generating hypotheses about economic policy-making and its link to authoritarian regime durability in other sectors. As Haber and Menaldo (2011) suggest, natural resource rents are a special case because they generally accrue directly to the state. They are thus posited to have direct positive effects on the ability of autocrats to secure their position in power. Other sectors, such as agriculture, are starkly different in that they do not so easily and directly generate large rents for the state. Instead, economic policy-making in the economy at large involves a calculation by autocrats about what level of taxation or subsidization is politically possible given the power of private economic actors within the polity. Theorizing the circumstances under which authoritarian governments choose to tax or subsidize competing economic actors requires a different perspective than investigating the magnitude of the effects of natural resource rents on regime durability.

Existing political science research into economic policy which follows the approach of Stigler (1971) and Peltzman (1976) is of little help to us here. Scholars have shown how variation across democratic countries affects economic policy, regulation and relative price levels. Majoritarian electoral systems are more competitive and make politicians more responsive to voters' policy preferences, leading to systematically lower real prices compared to proportional electoral systems (Rogowski and Kayser, 2002; Chang, Kayser, and Rogowski, 2008). However, authoritarian regimes are regarded as "too much of a mixed bag" to attempt any systematic account of their economic policies (Chang et al., 2011, 50).

Nonetheless, the basic approach of the Stigler-Peltzman model, in which politicians weigh up the support of *consumers* versus that of *producers*, is a fruitful starting point for theorizing authoritarian leaders' trade-offs when making economic policy. As scholars of authoritarian politics from Acemoglu and Robinson (2006) through Bueno de Mesquita and Smith (2009) and Svolik (2012) highlight, any dictator is faced with two fundamental problems: that of authoritarian control of the mass population, and that of authoritarian power-sharing with a smaller group of elites, or the 'selectorate' (Bueno de Mesquita and Smith, 2009). Simultaneously addressing these problems and maximizing support from elites and the masses is an analogous problem to that facing a democratic politician who trades off consumers' votes versus campaign contributions from producers. The approach which I follow in this dissertation is to extend this canonical political economy model to explain agricultural policy in the context of authoritarian regimes, where leaders respond not exclusively to the supply of votes and campaign contributions, but to a grim calculation of the threats posed to their regime by the mass population of food consumers and by a smaller group of rural, food producing elites.

1.2 Authoritarianism, Democratization and Agriculture

By looking at the role of agricultural policy in authoritarian regime durability, I am reintroducing agriculture into the literature on authoritarianism and democratization; a sector of the economy which features prominently in classic economic theories of democratization, but which has been neglected in the new literature on authoritarian regimes. This neglect is, to be sure, remarkable, and a consequence of these studies' turn away from the economics of regime durability. An approach to comparative authoritarianism which includes a theory of economic policy and growth *must* place the agricultural sector front and center, because of the centrality of the agricultural transformation process to development. Not only does growth imply the declining importance of agriculture, but general economic development depends on output growth within the agricultural sector. Therefore, the policy environment provided to the sector and its path of development is absolutely critical to broader economic and—by implication—political outcomes (Timmer, 1988).

In addition, in the short run, the size of the agricultural sector and the importance of food in households' day-to-day consumption budgets make the management of farmers' incomes and consumer food prices a pressing challenge. Authoritarian governments rule, on average, over less developed economies, meaning that agriculture makes up a larger share of their output and employs a greater share of their workers than in democracies. As I show in the lower panel of Figure 1.1, in 2009 countries which were not classified as democracies by Marshall and Jaggers' (2011) Polity scale had eleven percent more employment, and seven percent more output, in the agricultural sector than democracies. A few decades ago, these differences were even greater: in 1989, the average authoritarian regime had nineteen percent more employment, and the same amount more output, in the agricultural sector than the average democracy (The World Bank, 2012b). The agricultural sector looms large in the calculations of policy-makers in authoritarian regimes, as a source of employment, output and tax revenue but also, as we shall see, as a potentially destabilizing political force should farmers become disillusioned with government policy. Powerful landowners

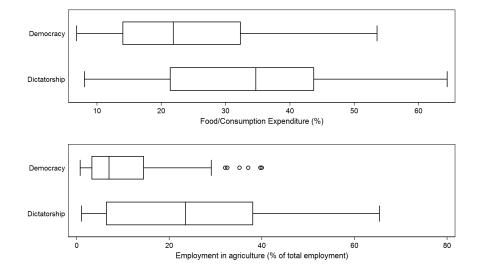


Figure 1.1: Food Consumption and Agricultural Output, Democracies vs. Dictatorships, 2009

Sources: The World Bank (2012b); Economic Research Service, USDA (2011); Statistisches Bundesamt (2013). Dictatorships are countries with a Polity score less than six (Marshall and Cole, 2011).

were a key part of the economic coalition supporting Pinochet's military regime in Chile, for example, which replaced the democratically elected socialist president Allende in a 1973 coup (Silva, 1993). In direct contradiction to their predecessor, the military leadership followed producer-friendly agricultural policies, halting land reforms, reversing policies which had caused the prices of food to fall, and by the early 1980s actively subsidizing agriculture (Floto, 1979; Valdes, Muchnik, and Hurtado, 1990). For Pinochet's regime, securing the support of landowners by following policies which were in their interests was a political necessity, lest he run the risk of being deposed by a rival backed by landed elites as he himself deposed Allende.

The threat which farmers can pose to their regimes presents a dilemma for authoritarian leaders, because on the other hand the bulk of the public under authoritarianism expends a larger proportion of its income on food than consumers in democracies. As I show in the upper panel of Figure 1.1, in 2009 inhabitants of countries which were not classified as democracies in the Polity dataset spent nine percent more of their total consumption

expenditure on food than inhabitants of democracies, on average.⁶ In Ukraine, for example, the average citizen spends 42% of their total consumption spending on food; their neighbors in Poland spend only 16%. In Venezuela, the average person spends 29% of their total consumption spending on food, while the equivalent figure in the United States is 7%, the lowest in the world. These trends are related primarily to development and not to regime type, but this does not alter the fact that authoritarian regimes rule over populations which are very sensitive to food price increases and can likewise become a threat to the regime should it not follow policies which place limits on the cost of living. For example, in 1977 violent mass protests erupted and threatened to overthrow the Sadat dictatorship in Egypt after subsidies on basic foodstuffs were eliminated and food prices increased considerably. Thereafter, the government never questioned its commitment to a policy guaranteeing a virtually limitless supply of low-cost bread to urban consumers, even at the expense of decreasing producer prices, relying on foreign food aid and decimating the domestic agriculture sector (Gutner, 2002). In the face of surging global food prices in 2007-08, this guarantee could not be fulfilled, and it is now widely acknowledged that the mass uprising in Egypt which toppled Sadat's successor Mubarak was sparked by food riots and discontent with government food policy (Ciezadlo, 2011).

Agriculture is a vitally important sector under authoritarian regimes, in the short run and for long-run development. This point was well taken by Moore (1966), who saw a particular capitalist form of agriculture which enriched urban wool traders as absolutely critical for the development of an emancipated urban middle class and democratic reform in England. Large-scale agriculture such as that in Eastern Germany, where labor-repressive cereal cultivation for export did not enrich urban traders, was a large factor blocking democratic reform in that country. More recent empirical and theoretical work gives special treatment to the agricultural sector, seeing a strong link between an unequal distribution of land in a country and authoritarianism. Examining the canonical case of Imperial Germany, Ziblatt (2008a) finds that deputies from districts characterized by higher levels of landholding inequality were more likely to vote against suffrage reform in the Prussian House of Deputies in the early twentieth century. In a later paper, he also links the presence of large landowners in German electoral districts to corruption and electoral fraud (Ziblatt,

 $^{^{6}}$ Own calculations based on international food consumption data from Statistisches Bundesamt (2013) and Economic Research Service, USDA (2011).

2009). In a previous paper, I have shown that landholding inequality in Reichstag districts was correlated with liberal deputies' votes in favor of repressive measures against Social Democrats in late 1870s Germany (Thomson, Forthcoming).

The redistributivist school of democratization theory (Boix, 2003; Acemoglu and Robinson, 2006) explains the correlation between landholding inequality and authoritarianism by large landowners' fear of taxation under democracy. Assuming that democracies are more redistributive and impose higher taxes than authoritarian regimes (Meltzer and Richard, 1981), and that land is a completely immobile asset, landowners will be particularly antidemocratic because their assets are particularly easy to tax. Ansell and Samuels (2010, 2012) predict that land inequality leads to a lower probability of a successful democratic transition because it is an indicator of the economic power of status quo elites. They also predict that land inequality decreases the demand for a democratic transition by the middle classes, because as land inequality increases the amount of land owned by the middle class decreases along with their desire for these landholdings to be protected against expropriation by democratic institutions. Baland and Robinson (2012), on the other hand, argue that landlords' interests in authoritarian institutions are a function of political rents accruing to land under authoritarianism. When landlords can control the votes of their workers, for example when the vote is not secret, land is valuable not only as a productive input but as a political resource, giving landlords reason to oppose democratic reforms.

It should, however, be noted that these depictions of the role of agriculture under authoritarian regimes, and how the sector influences regime stability, do not take into account the pervasive government intervention which characterizes the sector in developing autocracies (Timmer, 1988). Although the agricultural sector, and particularly landed elites, are seen as playing a special role in democratization processes, this role does not run through government policy. This approach to the question of how agricultural elites affect democratization appears incomplete when one considers the voluminous literature on the political economy of agricultural policy and the central role which regime type has been found to play in determining farm policy outcomes (Olper and Raimondi, 2011; Bates and Block, 2013). Authoritarian regimes have been found to follow significantly different agricultural policies to democracies, and the agricultural sector has been found to play a critical role in democratization processes, raising the question of whether these two phenomena are linked. In this dissertation, I explore this question. I find, for example, that authoritarian governments which face a powerful rural elite are more likely to support agriculture and that autocrats who support agriculture are less likely to be removed from office by rival elites. For theories of democratization and authoritarianism, this suggests that it is not—or at least, not exclusively—the taxation or expropriation of land which is the main concern of farmers in developing autocracies, but government interventions in agricultural markets and their effects on farm incomes and production incentives. That is, farmers' preferences over regime type are conditioned not only by long-term concerns about taxation and property rights, but by short-term concerns about the returns to their productive activities. Large landlords oppose democracy because they benefit materially from the rural-biased agricultural policies they are able to extract from authoritarian governments.

Economists have long noted the link between development and food policy, lamenting the tendency of governments of less-developed countries to cheapen farm produce for the benefit of urban food consumers. Most forcefully articulated by Lipton (1975, 1977), the urban bias thesis holds that governments of developing countries are attentive to the interests of their relatively wealthy, literate and politically organized urban populations while ignoring the impoverished, geographically dispersed and politically ineffectual rural majority. They therefore impose trade and subsidy policies which decrease agricultural output prices while cheapening food and non-farm inputs in order to promote industrialization and to enrich urban and commercial populations. The result is "growth with hunger", or rising average incomes in conjunction with high levels of inequality, inefficiency, and persistent mass poverty in rural areas.

Robert Bates (1981, 1983) famously argues that urban-biased policies are particularly prevalent, and harmful, in sub-Saharan Africa. State monopolies in agricultural exports provide a ready source of revenue for politicians seeking to divert resources to themselves, the state and its bureaucracy, and powerful urban industrialists and manufacturers. They therefore set their monopsonist prices lower than those on international markets, and make a profit as middlemen in external trade. Food prices are kept low, decreasing farmers' revenue, while protection of consumer and industrial goods markets is common, increasing household expenses and the cost of production for smallholders. As in Lipton's account, African states' interventions in agricultural markets have the goal of placating urban food consumers, bureaucrats and businessmen and do so at the expense of the large rural population. In a few cases, such as the rice industry in Ghana and the large farmers of Kenya, a small number of farmers is able to organize and successfully lobby the government for higher prices, but these are exceptions to the general rule (Bates, 1981, 87-95).

The escape from the 'growth-with-hunger' trap of agricultural price distortions in favor of food consumers comes, in the canonical economists' account, with development and the decline of the importance of agriculture in total national output. As first outlined in Anderson and Hayami's (1986) seminal study of agricultural policy in East Asia, under the development pattern countries shift from taxation to support of agricultural producers as their average income increases. As an economy grows, agriculture makes up a declining share of output compared to industry, and food consumption decreases relative to total income levels. These dynamics decrease opposition to subsidizing the agricultural sector because of its relatively small size, and the low real cost to consumers of increasing food prices. Furthermore, under the anti-comparative advantage pattern, support increases when farm incomes fall relative to those in the rest of the economy (Swinnen, 2010). This is because, as relative returns to the agricultural sector decline and the number of farmers also decreases, farmers demand for higher prices increases as does their ability, as a smaller group, to solve the collective action problem and organize to lobby government.

The classic work on the political economy of agricultural policy did not see much of a role for political institutions, although Bates (1981) does emphasize the role of coercion in suppressing the interests of the rural majority in the policy-making process. More recent work, however, has investigated the fact that only undemocratic governments can ignore the policy preferences of such a large segment of the population when discriminating against the agricultural sector.⁷ Beghin and Kherallah (1994) found that more pluralistic political systems—where political parties are allowed, for example—provide higher levels of agricultural protection. Swinnen, Banerjee, and Gorter (2001) and Swinnen (2009)

⁷ A relatively large literature also investigates the role of varying political institutions among democracies in determining agricultural policy. Thies and Porche (2007), for example, find that federalism and party fragmentation are both positively correlated with agricultural support in OECD countries, and Park and Jensen (2007) find that electoral systems which encourage politicians to appeal to narrow interests are associated with higher levels of producer support. Runge and von Witzke (1987) find that the institutional structures of the European Community (especially the unanimity rule in the Council of Agricultural Ministers) had a large effect on the development of the European agricultural trade and support regime under the Common Agricultural Policy.

note that European agricultural policy became significantly more pro-producer after the introduction of representative democracy, as for example in Belgium at the end of the nineteenth century. Recently, using a much-improved cross-national dataset, Olper and Raimondi (2011) show that transitions towards democracy are associated with significant increases in levels of agricultural protection. Similarly, Bates and Block (2013) find that improvements in executive accountability in Africa since the 1960s have been associated with greater agricultural subsidies and increased productivity in the sector.

However, this research on policy between democracies and dictatorships is of limited use for the study of authoritarian regime durability, because it has not been complemented by studies which examine the political economy of agricultural policy *among* dictatorships. Of course, this mirrors the findings in the political economy literature on education, public spending and human security outlined above. The key finding in the agricultural policy literature is that democratic regimes are more responsive to the preferences of rural residents, who often make up the bulk of a country's population and thus are a key source of support in elections. Therefore, democracies tend to support agriculture more than dictatorships, on average. However, this average correlation between democracy and support for agriculture could be masking cases where dictatorships are responsive to the wishes of the rural population despite not needing their electoral support to remain in power. Dictatorships need not be universally unresponsive to the policy preferences of the agricultural sector; which political regimes, democratic or otherwise, are responsive to the policy preferences of the rural population is a theoretical and empirical question deserving of further research. If, for example, features of democratic electoral systems can lead politicians to place greater weight on producers' interests over those of consumers, it is likely that features of authoritarian politics function in a similar manner and lead to significant policy differences among undemocratic regimes. I find that these policy differences do exist, and I show that they are a function of the competing political threats of food producers and food consumers. Authoritarian regimes do not all follow identical agricultural and food policies, but vary them to address these political threats. This variation in policy has significant effects on political instability and authoritarian regime durability, and sheds new light on the negative correlation between landholding inequality and democratization.

Mine is a similar theoretical point to that made by Jessica Weeks (2008) in her work on

signaling costs in inter-state disputes. She argues against the conventional theory that democracies can more easily signal resolve when directing threats at other states, because democratic leaders face greater 'audience costs' as voters frown on backing down from this sort of escalation. Pointing out that most authoritarian regimes do indeed face some degree of audience costs from backing down after initiating disputes, she goes on to show empirically that only personalist dictatorships and unstable dictatorships face significantly more resistance than democracies in inter-state militarized disputes, while all other dictatorships' threats were granted as much credibility as those of democracies. Weeks shows that by unpacking the homogeneous category of undemocratic regimes and examining how differences among dictatorships relate to the precise causal mechanism on which previous theory was based, new empirical insights about the behavior of authoritarian states in international relations can be gained, while existing theory is refined. I make an analogous point about authoritarian regimes' subsidy, tariff and trade policies. Authoritarian regimes are not as responsive to electoral incentives as democratic governments, but this does not mean that their incentive structures are identical. Just as Weeks 'unpacks' authoritarianism to show that different authoritarian regimes face varying audience costs in international disputes, I 'unpack' these regimes to show that different authoritarian regimes face varying political threats which cause them to make agricultural policy in systematically different ways, responding to threats and thus maximizing their tenure in power.

1.3 A Simple Model of Agricultural Policy Variation under Dictatorship

My account of agricultural policy's political causes and effects under autocracy necessitates, as a first step, an account of how policy is made under authoritarianism. This is a truly novel contribution: agricultural policy variation among democratic governments is far better understood by political economists than policy variation among dictatorships. Democratic governments weigh up the support of producers and consumers in terms of campaign contributions and votes, respectively, when making economic policy decisions (Stigler, 1971; Peltzman, 1976). Thus, institutional features which lead politicians to favor narrow producers' interests over those of consumers—such as proportional electoral systems—are associated with significantly higher prices for consumers (Rogowski and Kayser, 2002).⁸ The economic policy-making process under authoritarian regimes is less well understood, with dictatorships being "too much of a mixed bag" to attempt any general theory of their policies according to one recent account (Chang et al., 2011, 50). Nonetheless, it is clear that, at the least, authoritarian leaders must intervene in the economy in order to avoid economic crises, because these are seen as important precursors to regime collapse. More generally, authoritarian regimes have an interest in promoting the interests of specific economic actors who are key supporters of, or threats to, the regime, or as Haggard and Kaufman (1997, 267) put it, "... in all mixed economies the cooperation of some segments of the business elite is crucial for the stability of authoritarian rule." There is certainly empirical variation among authoritarian regimes to be explained: as I show in Figure 1.2 for the agricultural policies which are the subject of this study, although the variation in policies followed by dictatorships is not as great as the policy variation among democracies, it is still significant. Authoritarian governments follow a range of price support policies for farmers, ranging from those which significantly decrease producer prices under the classic 'urban bias' pattern to those which significantly increase producer prices vis-a-vis world markets.

I argue that in the case of interventions in the agricultural sector, it is indeed possible to construct a systematic account of authoritarian governments' policies, by identifying those economic groups which are key supporters or pose a threat to a regime due to their structural position in the economy. Authoritarian leaders intervene in the agricultural sector in order address threats from both elites and the masses, and thereby maximize their tenure in office. In this case, the elites and masses are the producers and consumers of food, respectively, in the agricultural sector.⁹ Making the economic policy instrument more concrete, I characterize it as a regulation which distorts farm produce and food prices, increasing the income of producers while decreasing the real income of consumers by increasing food prices, or vice-versa, in the way laid out in the familiar Stigler-Peltzman

⁸ For recent applications of this logic to agricultural policy, see Park and Jensen (2007) and Weinberg (2012).

⁹ This is a reasonable depiction in most cases: individuals or households are either net food producers or consumers, having opposed interests in agricultural policy. In addition, agricultural producers can make up a powerful elite within a country, as they did in Chile, but even if they are not *the* political elite in a country, producers are still a smaller group with opposed interests to the mass of food consumers within the polity.

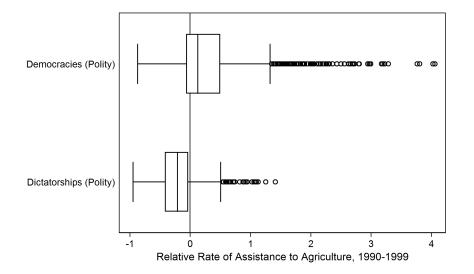


Figure 1.2: Agricultural Market Interventions, Democracies vs. Dictatorships, 1990-1991

Sources: Anderson and Valenzuela (2008) and Anderson and Nelgen (2012). Dictatorships (Polity) are countries with a Polity score less than six (Marshall and Cole, 2011).

model (Stigler, 1971; Peltzman, 1976)—though with some important modifications.¹⁰ This sets up the basic dilemma confronting authoritarian regimes when forming agricultural policy. There is an inherent trade-off which policy elites must make between increasing rents to producers and decreasing the costs of food to consumers. Both goals cannot, except at considerable fiscal cost which governments generally avoid, be pursued at once, and hence the optimal policy outlines a course of action which minimizes the political risks of a coup or a mass revolt based on the threat which each group poses to the regime.¹¹

¹⁰ Treating the policy instrument as a single price-distorting regulation captures the key dynamics of the policy-setting process, in which a trade-off must be made between minimizing food costs to consumers and maximizing profits for producers. However, in subsequent empirical analyses assistance to producers and taxes on consumers are separate (though very highly correlated) variables. See Appendix A for more information.

¹¹ It is possible for regimes to incur a fiscal cost and employ resources to prop up producer prices while maintaining consumer prices at a lower level, paying the difference from their budget. However, this is a relatively rare outcome in my data—producer price supports and consumer taxes are very highly correlated (r = 0.9, see Figure A.2, Appendix A)—and I do not deal explicitly with this situation in my model. I look at policy as a direct trade-off between producers, who prefer higer prices, and consumers, who prefer lower prices, and assume that higher producer prices are passed on directly to consumers. However, the question of fiscal resources, agricultural prices, and regime durability is an important one deserving of future research. Particularly in states which benefit from resource rents from oil (which are not included in the World Bank data I use, see Appendix A), or states receiving significant food aid, it presents itself as an

1.3.1 The Dictator's Political Support Function

In my model, the dictator seeks to remain in office by maximizing a Stigler-Peltzman (Peltzman, 1976) function of the political support of both the elites and the masses,

$$S = S(E, M) = S(y^E, y^M),$$
 (1.1)

where y^E and y^M are the incomes of the elites and masses, $\partial S/\partial y^i > 0$ so the dictator's support function is increasing in the income of both the elites and the masses, and $\partial^2 S/\partial y^i \partial y^j = 0$ meaning that there are no intergroup dependencies as each member of the elite a net producer of food, and each member of the masses is a net food consumer.

Because the elites and masses are food producers and consumers, respectively, we can also assume that the support of elites is increasing in farm profits, $y^E(\pi)$, $\partial y^E/\partial \pi > 0$, and the support of the masses is decreasing in food prices $y^M(p)$, $\partial y^M/\partial p < 0$, where π equals the profits of farmers and p equals the consumer price of food, and write the dictator's support equation (1.1) as a function of profits and prices,

$$S = S(\pi, p). \tag{1.2}$$

As above I assume here that $\partial^2 S / \partial \pi \partial p = 0$ so there are no intergroup political effects. The total income which *can* be redistributed via regulation by the dictator is constrained by producer cost and consumer demand functions in the agricultural sector, which underly the the profit function,

$$\pi = f(p, c) \tag{1.3}$$

where production costs c = c(Q) are an increasing function of quantity Q and profits are a increasing in price until the monopoly price, above which they are decreasing in price, $\partial \pi/\partial p \geq 0, \partial^2 \pi/\partial p < 0$. This implies, as I outlined above, that governments do not incur fiscal costs, redistributing resources from other sectors into agriculture in order to prop up farm produce prices while maintaining food prices at lower levels.

important factor in agricultural and food policy.

The minimum amount of income which *must* be redistributed within the agricultural sector by the dictator is a function of the political threats posed by the elite and masses. When the political threats of producers and consumers are not acute and there is insufficient competition for his office, the dictator can derive income from the economy through authoritarian rent-seeking.¹² This is one important difference between my theory of economic policy-making under dictatorship and previous analyses of economic policy under democracy which assume sufficient political competition for the regulator's office (Peltzman, 1976; Rogowski and Kayser, 2002). A dictator, faced by insufficient threats from rival groups within the agricultural sector, can engage in rent-seeking because the political constraints faced by them are relaxed. Such an outcome is most likely when a regime has access to means of coercion, so that opposition to their rule is severely constrained. Because my dissertation deals only with agricultural policy-making, while assuming other means of regime maintenance such as coercive institutions to be held constant, I do not deal with these outcomes explicitly in my analysis. However, further research which integrates agricultural policy within a larger set of regime stabilizing mechanisms could take the relaxation of such a political constraint as its theoretical starting point.

1.3.2 The Dictator's Optimal Policy

In deciding on the optimal policy, and assuming sufficient political threats, the rational dictator chooses a profit and price level π, p subject to the constraint λ to maximize the Lagrangian,

$$\mathcal{L} = S(\pi, p) + \lambda(\pi - f(p, c)). \tag{1.4}$$

The solution to this maximization problem sets the marginal political product—that is, the marginal gain in political support for the dictator—of a dollar of profits for producers

¹² Dictators often derive income from the economy as rent-seekers, or 'stationary bandits' as Olson (1993) calls them. In addition, a dictator could themselves be an owner of a factor of production (for example, capital or land), and thus have an interest in setting economic policy with regards to their own income. This is the assumption of Acemoglu and Robinson (2006) in their model of redistributive policy under dictatorship. The broader economic consequences of the resulting distortions can be important: Mohtadi and Roe (2003), for example, show that regime type has important effects on levels of rent seeking, corruption and economic growth. However, here I do not focus on the broader concerns of factor ownership or the long-run effects of market distortions; instead I look specifically at the conditions under which a dictator manipulates the incomes of economic elites (producers) and the masses (consumers).

 $(\frac{\partial S}{\partial \pi})$ equal to the marginal political product of a one dollar price cut for consumers $(-\frac{\partial S}{\partial p})$, resulting in a set of convex political 'iso-support curves' which depict the shape of the political trade-off between profits (elite support) and prices (mass support) made by the dictator when setting policy. Given sufficient threats, the rational dictator will choose a policy which maximizes the support of both elites and masses, making profits as large as politically possible and prices as small as politically possible until the support curve reaches tangency with the price-profit possibilities frontier $\pi = f(p, c)$.¹³ Several iso-support curves S_i and their tangency points at price levels P_i are shown in Figure 1.3.

Figure 1.3: The Stigler-Peltzman Model of Producer vs. Consumer Power

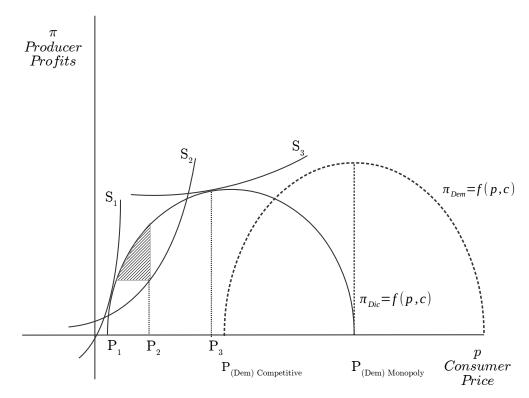


Diagram adapted from Peltzman (1976).

¹³ Of course, allowing policies which deviate from perfect competition assumes that the dictator controls not only price levels but also market entry, so that profits are not competed away.

Examining first the familiar example of policy under democracy, with the dashed priceprofit possibilities frontier $\pi_{Dem} = f(p, c)$, the preferred policy of producers is for regulation to set prices at $P_{(Dem)Monopoly}$, the level at which marginal revenue equals marginal cost, profits are maximized and they receive monopoly rents. On the other hand, food consuming masses prefer a regulation policy which sets prices at $P_{(Dem)Competitive}$, the competitive market price at which producer profits are zero. Depending on their institutional incentives, democratically elected regulators will pick a price policy somewhere between these two prices.

To adapt the Stigler-Peltzman model to policy-making under authoritarianism I shift the price-profit 'hump' $\pi_{Dic} = f(p, c)$ to illustrate the policy outcomes which are more important in the authoritarian case. Because authoritarian regimes regulate to lower agricultural prices compared to democracies, on average, I shift the price-profit hump to the left. And because authoritarian regimes typically rule over smaller economies than democracies, I make the area under this hump somewhat smaller than in the democratic case. For illustration's sake, I also include rent-seeking behavior by a dictator in my diagram, the case when the political constraint λ is relaxed and policy is implemented within the price-profit hump, with the difference between prices paid by consumers and profits received by producers accruing to the government.

In the case that both elites and masses pose a sufficient threat to the regime, the dictator prefers the policy which maximizes both groups' political support by maximizing profits and minimizing prices simultaneously, moving as far towards the north-west corner of Figure 1.3 as possible, and reaching equilibrium at a point tangent to the constraint $\pi_{Dic} = f(p, c)$. In this case, what determines which tangent point is reached is the slope of the iso-support curve S_i ; as the curves become steeper, the tangent point moves further down the priceprofit hump towards the masses' preferred policy (as in S_1), and as they become flatter the tangent point moves up the hump towards the elites' preferred policy (as in S_3).

When the threats of neither the elites nor the masses are sufficient to compel the dictator to maximize his support, the rent-seeking case emerges and policies can be chosen which are not tangent to the price-profit possibilities frontier $\pi_{Dic} = f(p, c)$. In this situation, levels of prices and profits are chosen by the dictator which lie within the price-profit hump, and a wedge of income accrues to the dictator, as at the price P_2 on the iso-support curve S_2 ,

where the shaded area corresponds to the rents expropriated from the agricultural sector.

1.3.3 The Political Power Function

To make this analysis politically meaningful, I move now to consider the political power function which determines the shape of the iso-support curves, the optimal level of regulation of the agricultural sector under dictatorship, and who gets what share of the spoils. Chang et al. (2011) have given these political support functions extensive attention in the democratic context, focusing on how electoral rules change the trade-off between narrow sectoral interests and broader electoral interests, but no work has yet attempted to integrate the Stigler-Peltzman framework within a theory of authoritarianism as I do here. I specify a functional form for the Stigler-Peltzman political support function from (1.1), making it Cobb-Douglas with the parameter α denoting the weight placed by the Dictator on the support of the elites and $(1 - \alpha)$ the weight placed on the support of the masses,

$$S = E^{\alpha} M^{(1-\alpha)} = (y^E(\pi))^{\alpha} (y^M(p))^{(1-\alpha)} | \alpha \in (0,1).$$
(1.5)

The slope of the iso-support curves as in Figure 1.3, and thus optimal policy at the tangency with $\pi = f(p, c)$, is determined by the dictator's marginal rate of substitution (MRS) for the political support of the elite and the masses. We can find this MRS by appealing to the implicit function theorem, such that holding the dictator's support level S constant at the level \bar{S} ,

$$MRS = \frac{dy}{dx}\Big|_{S=\bar{S}} = -\frac{\frac{\partial S}{\partial p}}{\frac{\partial S}{\partial \pi}}.$$
 (1.6)

First, consider the partial derivatives,

$$\frac{\partial S}{\partial p} = (y^E(\pi))^{\alpha} (1-\alpha) (y^M)^{-\alpha} \left(\frac{\partial y^M}{\partial p}\right),$$
(1.7)

$$\frac{\partial S}{\partial \pi} = \alpha (y^E)^{\alpha - 1} \left(\frac{\partial y^E}{\partial \pi}\right) (y^M(p))^{(1 - \alpha)}, \qquad (1.8)$$

and then the simplified MRS,

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$$MRS = \frac{dy}{dx} = -\frac{\left(\frac{\partial y^M}{\partial p}\right)}{\frac{\alpha}{1-\alpha} \left(\frac{\partial y^E}{\partial \pi}\right)}.$$
(1.9)

Examining the comparative statics given by (1.9), we see that the dictator's MRS is *positive*, because all terms except $\partial y^M / \partial p$ are positive. Therefore, all the political iso-support curves are convex, as seen in Figure 1.3, implying that the level of price supports can never exceed that at the apex of the $\pi = f(p, c)$, the monopoly price.

Most importantly for the question at hand, the MRS is decreasing in α , indicating that as the weight placed by the dictator on the support of the elites increases, the slope of the iso-support curves becomes flatter and the resulting policy moves closer to the elites' ideal policy, a tangency high on the price-proft hump closer to the monopoly price. This situation resembles that at P_3 in Figure 1.3, where the relatively flat iso-support curve S_3 reaches tangency relatively high on the profit-price hump. Conversely, the MRS is increasing in $(1 - \alpha)$, the weight placed by the dictator on the political support of the masses. This implies that as the weight placed on consumer interests becomes relatively small, the slope of the iso-support curves becomes steeper and the dictator's policy choice moves closer to the ideal point of the masses, as at P_1 where the curve S_1 reaches tangency relatively low on the profit-price hump.

1.4 The Shape of the Dictator's Political Power Function: Collective Action, Political Threats and Agricultural Policy Under Authoritarianism

I have adapted the Stigler-Peltzman framework to show how a dictator can maximize their political support by manipulating the relative prices and profits faced by the masses (food consumers) and elites (food producers), based on a weighting of each group's interests represented by the coefficient α in their political support function. This is an integral part of the survival strategies of authoritarian regimes. However, it remains to be seen how this weighting of competing interests is carried out by the dictator and how the coefficient α in the dictator's support function is derived.

Following Svolik's (2012) conception of authoritarian politics, I argue that unlike in democracies, where politicians make economic policy decisions weighing the support of rival groups in terms of votes and campaign contributions, a dictator must make decisions based on a grim calculation of the threat posed to their regime's survival by groups with competing interests: producers (elites) and consumers (the masses). The weight attached to the support of the elites and the masses by the dictator depends on the threat which each group poses to the authoritarian regime. The dictator manipulates agricultural policy in order to change the relative costs and benefits to each group of accepting their rule, thus mitigating the risk of a costly coup or revolution.

Authoritarian leaders are acutely aware of latent and manifest threats to their positions. These could come in the form of possible mass uprisings, such as that sparked by the removal of government food subsidies in Egypt in 1977 (Gutner, 2002), or the June 1953 attempt by the East German population to overthrow the socialist government after sharp declines in real incomes for workers (Weber, 2004). Threats can also stem from farmers' position within a regime's support coalition, as in the case of Pinochet's Chile outlined above (Silva, 1993), or from their ability to threaten the country's food security and growth prospects through decreased production, as white commercial farmers did in the early years of Mugabe's government in the early 1980s (Herbst, 1988). However, insofar as political threats originate from within the agricultural sector, and food consumers and producers, they hinge on each group's capacity to organize in opposition to the government, and can be addressed in part through policies which increase their real incomes. Thus, Sadat's government acted to keep consumer prices low in order to prevent further revolts, while Mugabe maintained the existing price negotiation structures with white farmers, keeping prices high for the same agricultural producers who had been the "political backbone" of Ian Smith's Rhodesian Front opposing black majority rule (Herbst, 1988, 269). By recognizing and addressing the competing political threats of food producers and consumers, authoritarian leaders attempt to maximize their tenure in power.

The impact of farmers and consumers on policy under authoritarian regimes is based upon political threats. However, these threats can run through varying channels and can be of varying strengths. More importantly, the prerequisite for the realization of a political threat under authoritarianism is collective action: the ability of individuals to act together and

	Socio-Econon	nic Structures	Instituti	ons
	Threat Type	Power Source	Threat Type	Power Source
Consumers	Mass Unrest	Urbanization	Undermine Electoral	Votes
			Legitimacy	
Farmers	Lobbying	Land Incouslity	Undermine Electoral	Votes, Malap-
rarmers		Land Inequality	Legitimacy	portionment
	Elite Coup		Positions Within	Veto power
			Institutions	

Table 1.2: Food Consumers and Farmers, Threats and Sources of Power

make demands of a regime (Olson, 1965). Not all groups' interests are equally accounted for by authoritarian governments, but the groups who have the greatest capacity to organize in collection action in opposition to the regime can make the greatest demands of it. In my account, a group's capacity for collective action can be based upon two forms of power: *Structural Power*, an ability to organize which is inherent to the group's socio-economic position in society; and *Institutional Power*, or an ability to organize which is based upon institutions which facilitate collective action such as elections, parties and legislatures. I lay out the types of threats which food consumers and farmers can pose to authoritarian regimes, and the power bases of these threats, in Table 1.2.

The most obvious and important threat posed to authoritarian governments by food consumers is that of mass unrest, a form of contentious collective action which is facilitated by *structural* factors such as when populations are densely concentrated in urban areas and comparatively easy to organize (Smith, 2004; Wallace, 2013). In urban areas, citizens find it easier to observe the actions and preferences of their neighbors, solving the monitoring problem which hampers collective action and stifles mass unrest under authoritarian regimes (Kuran, 1989). Therefore, food riots in response to high food prices are most common in large cities, posing a significant risk to the stability of authoritarian regimes (Bellemare, 2014). This threat can be responded to by policies which reduce the price of food for urban consumers.

Consumers also have *institutional* power under the sizeable subset of authoritarian regimes which allow for elections. Not all authoritarian regimes allow for elections. However, an increasing number do; these governments are referred to as *anocracies* by Marshall and Cole (2011) and in fact make up the majority of contemporary undemocratic regimes. The presence of nominally democratic institutions such as elections (Levitsky and Way, 2002, 2010), legislatures (Gandhi and Przeworski, 2007; Gandhi, 2008) and parties (Magaloni, 2006, 2008; Brownlee, 2007) has been found to have a significant positive effect on regime durability. Therefore, especially in my case studies, I must explicitly engage not only the *structural* threat of food consumers to a regime through urban unrest but also their *institutional* threats which run through elections and political parties.¹⁴ In Malaysia, for example, the political power of rice farmers ran primarily through the ruling party and through their ability to undermine the support of party elites for the Prime Minister. Food consumers can can pose a threat to political stability by withdrawing their electoral support for the ruling elite and casting doubt on its legitimacy (Levitsky and Way, 2002, 59). This threat can provide an incentive for authoritarian elites to respond to consumers' policy preferences by implementing policies which reduce food prices.

Food producers can pose a *structural* threat to an authoritarian regime by directly undermining its support from economic elites. Because all regimes are dependent, to a certain extent, on an economic support coalition, the presence of agricultural producers or their representatives within this coalition is a threat because farmers could withdraw their support for the leadership and potentially support a challenger. Thus, by making demands through lobbying or the formation of coalitions with other powerful economic elites such as urban capitalists, farmers can collectively pose a threat to an authoritarian regime. This threat is based upon their structural power; when fewer farmers possess greater economic resources they find it easier to organize and lobby (Olson, 1965) or coalesce with capitalists, are more likely to belong to the economic elite within a regime, and thus higher levels of landholding inequality increase farmers' structural threat under authoritarian regimes. This threat, when credible, is addressed by authoritarian leaders by policies which increase the prices of farm produce and thus farmers' incomes.

Agricultural producers can also wield *institutional* power which allows them to pose a threat to a regime. Elections help grant dispersed groups political influence; where elections are held and electoral districts are drawn so that rural areas are over-represented due to malapportionment, farmers have power because their votes are relatively important

¹⁴ In my cross-national statistical analyses, I control for institutional aspects by including polity scores in my models.

compared to those of urban residents, and they can undermine the electoral legitimacy of the regime (Samuels and Snyder, 2001). This is also true in the authoritarian setting, although these governments do not rely exclusively on elections to remain in power. Although I do not control for malapportionment in my cross-national analyses, I do argue that the influence of rural interests in both Imperial Germany and Malaysia was enhanced by malapportionment which favored rural areas in the electoral system. Where farmers or their representatives hold important veto positions within political institutions, they also pose threats and have greater influence over policy decisions. For example, I show in my case study of Imperial Germany that landowners made up a large share of deputies in the Reichstag and held important positions in cabinet, giving them greater influence over agricultural policy-making. In electoral systems with greater degrees of rural-urban malapportionment, and where farmers hold veto positions within the political system, authoritarian regimes follow policies which increase farm produce prices in order to co-opt farmers' political threats.

Authoritarian leaders take these threat structures into account when assigning a weight to producers and consumers in their political power function, as represented by the parameter α in Section 1.3 above. They make agricultural policy in order to address the immediate threats of farmers and food consumers. When the threat of one group is greater, it is addressed through a policy which increases the relative income of that group and thus co-opts them into supporting the regime. Milan Svolik (2012, 170) refers to such policies as "co-optation via transfers", and in their model Acemoglu and Robinson (2006) foresee a similar role for redistributive policies which decrease the economic incentives for groups to remove a ruling government from office. When consumers pose a credible threat to the regime, because they are heavily concentrated in large cities or because they threaten to withhold their electoral support for the regime, their weight is greater in the dictator's political power function, α is smaller, and food prices are decreased. When farmers pose a credible threat to the regime, because of structural or institutional factors, their weight is greater in the political power function, α is greater, and food and farm produce prices are increased. When both groups pose credible threats to the regime, leaders will attempt to "ride the fence", α will be at a moderate value, and policies will be implemented which are tolerable to both groups without tilting the policy balance heavily in either direction.

When neither group poses a credible threat to the regime, they will engage in rent-seeking: policies which divert resources from the agricultural sector to their own personal coffers.

1.5 The Political Effects of Agricultural Policy and Towards an Economic Typology of Authoritarian Regimes

By effectively weighting the political threats of the food-consuming masses and foodproducing elites, and manipulating agricultural policy, authoritarian leaders are able to co-opt threatening economic groups into their regimes and prolong their tenure in power. The threats posed by the masses and elites to a regime involve costs to the dictator through successful or unsuccessful mass revolutions or coups. For the dictator, successful mass revolutions or coups are extremely costly as they imply their removal from power and in some cases their death (Svolik, 2012). Unsuccessful revolutions or coups, however, are also costly: they imply the loss of economic output due to lost work time and the destruction of productive resources (Acemoglu and Robinson, 2006; Gandhi and Przeworski, 2006). Therefore, the dictator has an incentive—when threats of consumers and producers are sufficient—to address them through policy in order to prevent political instability.

For threatening food consumers and food producers, the incentives to mount a challenge to the dictator must always be weighed against their relative welfare under an alternative regime, the costs involved in a revolution or coup, and the uncertainty of the outcome of a power struggle (Acemoglu and Robinson, 2006). Holding all else constant, as the returns to each group under a regime increase, the incentives to mount a challenge to that regime decline because the relative benefits from an alternative government decrease. Thus, as the food-consuming masses' real incomes $y^M(p)$ increase as a function of lower food prices put in place by a dictator's policies, i.e. $\partial y^M / \partial p < 0$, they are less likely to mount a revolution against that dictator. Similarly, as producing elites' incomes $y^E(\pi)$ increase as a function of higher profits resulting from government policy, i.e. $\partial y^E / \partial \pi > 0$, they are less likely to mount a challenge to a regimes' leadership.

What emerges from these political and economic calculations is a feedback loop between political threat structures and agricultural policies. As threats from consumers or producers become greater, regimes respond via policies which in turn mitigate these threats. This reciprocal relationship leads to distinct *patterns* of threat structures and policy responses which can provide an economic lens for constructing a typology of authoritarian regimes urban-biased and rural-biased—as laid out in comparison to several prominent previous regime typologies in Table 1.3 below.¹⁵ Urban-biased regimes are a type whose economic characteristics were identified by Lipton (1977) and Bates (1983), though these authors did not explicitly state that all governments following urban biased policies are authoritarian. Urban-biased regimes face credible threats of costly mass unrest from the urban foodconsuming masses, who are typically concentrated in large cities and are extremely sensitive to food price increases. For this reason, they follow policies which significantly decrease food prices in order to maintain regime stability. Egypt is the canonical example of such a regime (Gutner, 2002).

The major innovation of this dissertation, however, is to highlight the importance of rural-biased regimes. Rural-biased regimes face credible political threats from rural foodproducing elites, who pose the risk of a coup deposing the current leadership. They therefore follow agricultural policies which significantly increase the price of agricultural produce in order to maintain regime stability. In Chapters 4 and 5 I give detailed accounts of how political threats from rural interests translated into pro-rural agricultural policies and regime stability in Imperial Germany and Malaysia, respectively. In Imperial Germany, powerful landed aristocrats dominated the political system and posed a significant risk to its stability when their economic position became eroded following dramatic grain price decreases in the 1870s. By intervening in agricultural markets to prop up grain prices, the German government maintained the economic and political position of these aristocratic Junkers and with it the stability of the monarchy. In Malaysia, restive rural Malay elites posed a significant risk to the regime after experiencing electoral losses in 1969. By making a dramatic, interventionist pro-agriculture policy shift, the government was able to placate those politicians in the ruling coalition who were calling for a single-party Malay dictatorship and restore political stability to the country.

As I discussed at length above in Section 1.1, previous approaches to comparative authoritarianism have focused on political institutions, not on economic structures or policies. Thus Geddes (1999) typology focuses on who wields power under authoritarianism, and

¹⁵ Other regime typologies, too numerous to list, also exist in the literature. Svolik (2012, 28) provides a useful and brief overview for the interested reader.

Author	Types of Regime	Example	Dimensions of Variation
Geddes	Personalist	Uganda (Idi Amin)	Institutional
0.00000	Military	Thailand	Organization of
(1999)	Single-Party	Malaysia	Power
			Militarization,
Svolik			Political Parties,
(2012)			Leg. Selection,
			Exec. Selection
	Machine	Malaysia pre-1998	
$Sl_{a,top}$ (2002)	Bossism	Malaysia 1998-2003	Personalization,
Slater (2003)	Junta	Thailand pre-1988	Institutionalization
	Strongman	Pakistan (Musharraf)	
	Machine	Malaysia	
Weeks	Boss	Egypt (Mubarak)	Militarization,
(2012)	Junta	Thailand	Personalization
	Strongman	Uganda (Idi Amin)	
Schedler	Electoral	Malaysia Mariao	Dograd of Floateral
	Authoritarian	Malaysia, Mexico	Degree of Electoral
(2006)			Competition
Thomson	Rural-Biased	Imperial Germany, Malaysia	Economic Threats,
	Urban-Biased	Thailand, Egypt	Ag. Policies

Table 1.3: Rural-Biased Dictatorships in Comparative Perspective

how. Both Svolik (2012) and Slater (2003) have taken issue with this categorization. Svolik (2012, 26-39) argues that the categories of personalist, military and single-party regime do not capture formal institutional characteristics of regimes and in many cases these categories overlap. He thus puts forward a four-dimension scale for classifying regimes: the degree of military involvement in politics; the degree of restriction of political parties; legislative selection; and executive selection. Slater (2003) argues that Geddes' categories conflate despotic and infrastructural power, and thus obscures how personalization of power can run through institutions such as political parties under authoritarian regimes. He thus puts forward a classification of authoritarian regimes based on the dimensions of personalization and institutionalization. Weeks (2012) adapts Slater's regime typology to capture

features of regimes which affect domestic audience costs in international conflicts. Schedler (2006) focuses on a single regime type which maintains itself through the use of electoral institutions.

It should be clear to the reader that the patterns of political threat structures and agricultural policy responses which underly urban-biased and rural-biased regimes in my account are quite distinct from the institutional patterns emphasized in previous typologies of authoritarian regimes. While these authors focus on who wields power in dictatorships and how, I ask where the most acute threats lie in a polity and how dictators respond to them through agricultural policy. This is a starkly different approach to comparative authoritarianism, as I argue above: I integrate an economic approach to authoritarian regimes with an agent-centered focus. Because my approach is so different, there is no overlap between previous typologies of authoritarian regimes and my own. There is no a priori reason to assume that the threats posed by food consumers and food producers should vary significantly across military, personalist and single-party regimes, for example. Military regimes could be assumed to be less threatened by the food-consuming masses due to their repressive resources. They therefore should follow rural-biased policies as the military dictatorship under Pinochet did (Silva, 1993). However, this need not always hold, as the Thai case illustrates, where a series of military regimes in the 1960s and 1970s followed urban-biased policies which significantly decreased the price of food for farmers and consumers (Anderson and Martin, 2009). Taking an economic approach to comparative authoritarianism involves conceptualizing new types of political threats to regimes and new types of responses to these threats.

Previous analyses have some strengths over my approach. Most importantly, institutions are plainly observable political phenomena, making it relatively easy to capture their effects on authoritarian politics—which are, to be sure, real and significant. The sorts of political threats which I examine, by contrast, are by nature latent variables and often obscured by regimes responses to them: the capacity of an urban population to erupt into food riots is often not realized yet still has an effect on authoritarian politics. Nonetheless, institutional approaches also have some weaknesses. Most obviously, they do not lend themselves to the analysis of non-institutional features of authoritarianism, such as ethnic politics or, my topic of interest, economic policy. Existing typologies can only be useful for this type of analysis when they coincidentally overlap with other political cleavages, for example when the military is dominated by one ethnic or economic interest group and controls the government.

Perhaps most importantly, it is clear that scholars have found that institutional features of authoritarian regimes have important political effects, but it is still unclear where these regime types come from. That is, existing typologies of regimes have served as important *independent* variables in the study of authoritarian regimes, but not as *dependent* variables. Some work has gone against this trend, most prominently Slater's (2010) book which argues that contentious politics drives elite collective action and the formation of a particularly durable regime which is similar to the 'machine' type in his earlier typology. Svolik (2012) also engages the question of why military and party dictatorships emerge in the last two empirical chapters of his book. However, it is fair to say that the question of the origins of these regime types, and that of how these origins relate to regime types' political effects, is still relatively unexplored in the literature.¹⁶ Considering my approach to comparative authoritarianism, although I must deal with a thorny operationalization problem when measuring the competing threats of economic groups to a regime, I explicitly examine both the causes and the consequences of these political threats, linking them in patterns of threats and agricultural policy responses which define distinct sets of regimes with distinct survival strategies. In this way, my contribution to the literature can be considered more complete than some others.

1.6 The Plan of the Dissertation

The contribution advanced in this dissertation is twofold. First, to take a novel economic approach to comparative authoritarianism, systematically investigating the varying threat and incentive structures facing authoritarian leaders by economic actors, how these are

¹⁶ This is a very similar point to that made by Pepinsky (2014) in a very recent article reviewing some of the more prominent recent contributions to the literature on political institutions and authoritarian regime durability. He would agree with my focus on economic policy and my move to de-emphasize institutions when he argues that "authoritarian institutions are epiphenomenal on more fundamental political, social and/or economic relations ... authoritarian institutions cannot be studied separately from *the concrete problems of redistribution and policy that motivate regime behavior*" (emphasis added).

translated into economic policy, and what effect the resulting policy has on regime durability. To this end, I adapt the Stigler-Peltzman framework to the authoritarian context, deriving the short-run political equilibria underlying policy from competing threats of producers and consumers rather than electoral incentives and campaign contributions as in the democratic context. Second, to apply this theoretical framework to a policy area of substantive significance under authoritarian regimes, that relating to agriculture and food, and therefore to make a novel contribution to scholars' understanding of the political economy of agricultural policy and economic development. I therefore analyze cross-national data on government policies in the agricultural sector, and write case studies detailing the ways in which farmers and food consumers pose threats to authoritarian regimes, how these threats are translated into policy, and what the economic and political effects of policy are. Chapter 2 is a comparative study of the differences in agricultural policy among authoritarian regimes and between these regimes and democracies. I apply the theoretical predictions on the effects of political threats on agricultural policy under authoritarian regimes generated in Section 1.3 to dispute the stark dichotomy between democratic and non-democratic governments presented in previous studies. I present novel evidence showing that varying threat structures generate enough policy variation *among* dictatorships to render these previous findings empirically unsound. I show that the political threats of both producers and consumers have significant effects on policy under authoritarianism. The canonical urban-biased agricultural policies emerge under authoritarianism when consumers' political power is heightened through high levels of urbanization and low levels of income inequality. When producers' political power is relatively high, however, due to high levels of landholding inequality, rural-biased authoritarian regimes do not subsidize agriculture significantly less than democracies.

In Chapter 3 I move on to consider the problem of policy-making under authoritarianism described in Section 1.3 together with the question of its political effects described in Section 1.5. I use cross-national statistical analysis to test the relationship between elite threats, mass threats and agricultural policy. As outlined above, I argue that there is a complex feedback mechanism linking agricultural policy and regime stability, in which the risk of instability determines the policies chosen by leaders, but those policies simultaneously have an effect on instability. I model this relationship using two simultaneous equation models

taking elite transitions and urban unrest as dependent variables, respectively. My findings suggest that increasing food taxes increases the likelihood of urban unrest. However, increasing producer price supports decreases the likelihood of regime collapse or an elitedriven leadership transition, empirical evidence of the policy trade-off described in Sections 1.3 and 1.5 above. Interestingly, there is no significant correlation between the likelihood of urban unrest and government responses through lower food prices, suggesting that the lower average levels of agricultural price supports observed under authoritarianism are not a function of structural threats. On the other hand, regimes do significantly increase agricultural price supports in the face of the threat of an elite transition, suggesting that elite politics are more important for agricultural policy-making under authoritarianism than has been found in previous studies.

Two further chapters look more closely at the political economy of rural-biased dictatorship, and how agricultural policy both responds to, and shapes, political threats posed to authoritarian leaders by rural elites. Chapter 4 is a historical case study examining the introduction of protectionist agricultural tariffs in Imperial Germany. It confirms the theoretical arguments outlined above and the findings of Chapter 3: that the interests of rural elites are weighted more heavily than those of food consumers in agricultural policy-making under rural-biased authoritarian regimes. I argue that the protectionist 'iron and rye' coalition which significantly raised domestic agricultural produce prices in Germany was not a simple function of economic interests or political ideology, as has been previously argued by political scientists. Instead, it was a short-term policy response to credible threats posed to the German Chancellor Bismark by rural aristocratic elites at the end of the 1870s. In order to placate powerful agricultural elites in the face of sharply declining grain prices, and secure their economic and political position in the country, Bismarck introduced a tariff bill which served to significantly increase farmers' incomes in Germany relative to other European countries. The passage of the bill in the Reichstag was not determined only by the economic composition of representatives' districts, but also by the political power of food producers and consumers within electoral districts and elite politics. In particular, an unequal distribution of landholdings in the empire gave considerable political power to landowners and aristocrats, who made up a disproportionately large number of members of the Reichstag and were very supportive of the protectionist bill. In addition, Bismarck's

ability to craft a parliamentary coalition of conservative and Catholic Reichstag members was decisive in ensuring the passage of the bill. The effect of the 1878 protectionist tariff in Germany was to secure the Chancellor against conservative landed aristocrats, preventing intra-elite conflict which threatened to jeopardize his position in power, and to secure the position of the landed aristocracy until the outbreak of World War One.

Chapter 5 is a case study of the interventionist, pro-agriculture policy shift made by the Malaysian government as a response to a political crisis in 1969. I argue that the implementation of the New Economic Policy in the country aimed to placate powerful rural Malay elites, who were ascendant within the ruling coalition after it suffered surprising electoral losses that year. In order to quell intra-party strife which threatened to drag the country from an electoral authoritarian regime into a one-party Malay dictatorship, Prime Minister Razak implemented a package of rural development and agricultural policies which privileged the rural population at the expense of urban Chinese. This had the effect of placating hard-liner Malay 'Ultra' elites within the ruling party and ensuring the stability of the Malaysian regime as an intra-ethnic coalition within an "electoral authoritarian" regime (Schedler, 2006), rather than as a single-party dictatorship. The Malaysian case therefore provides further evidence that agricultural policy can serve as an important tool of intra-elite power-sharing under authoritarian regimes, and in promoting regime stability must not be used only to provide low food prices for urban consumers.

Chapter 2

Agricultural Policy under Democracy and Dictatorship

Research has consistently found that authoritarian regimes follow urban-biased policies which decrease returns to farming. These policies have important consequences for development, global trade and regime stability. However, the established wisdom does not take into account policy variation among authoritarian regimes and accounts for only one side of authoritarian governments' policy trade-off between the interests of consumers *and* producers which I lay out in Chapter 1. Thus, in democracies, policies ensuring higher returns to farmers result from sensitivity to the interests of rural voters (Bates and Block, 2013), the ability of farmers to organize and lobby government, and the decreasing relative costs of subsidies associated with economic development (Swinnen, 2010). Under authoritarian regimes, on the other hand, the agricultural sector is taxed in order to provide cheap food for urban consumers and capital investments in manufacturing, at the expense of the rural population (Lipton, 1975; Bates, 1981). These policies are driven by short-term political calculations, but can have wide-reaching consequences for regime stability by driving ruralurban migration and increasing the capacity of the urban population to mobilize against the regime (Wallace, 2013).

Using the insights generated from my application of the Stigler-Peltzman model to the authoritarian context in Chapter 1, I challenge this monolithic conception of authoritarian agricultural policy. By accounting for the political threats of both consumers *and* producers, and estimating these threats' impact on policy, I will show that only *some* authoritarian governments provide significantly lower levels of agricultural support than democracies. Where producer threats are relatively strong and must be weighted more heavily by authoritarian leaders, for example where farms are relatively large and landholding inequality is high, authoritarian regimes do not support agriculture less than democracies. Where consumer threats are strong and must be weighted more heavily by autocratic governments, for example where the population is concentrated in urban areas, authoritarian regimes do support agriculture less and decrease the cost of food. Where consumers are divided by income inequality and less threatening, authoritarian regimes do not provide significantly lower food prices than democracies.

This finding has important implications for studies of development, democratization and authoritarian regimes. Given the considerable impact of agricultural market distortions on global trade and rural development, enhancing our understanding of the political determinants of distortions to global agricultural markets is an important step towards eliminating welfare-reducing policies. Revealing the full spectrum of authoritarian agricultural policies provides a deeper understanding of the determinants of rural poverty, rural-urban migration and associated economic inequality and political instability. Most importantly, accounting for policies like those used to support food producers or consumers is also a useful corrective to economic theories of democratization, which draw one-way lines of causality from socio-economic structures to political outcomes and do not examine the determinants of authoritarian economic policy, or its impact on economic and political development. By exploring the extent to which development and structural change are themselves shaped by authoritarian regimes, democratization scholars can open up an important avenue of research which will deepen our understanding of the determinants of authoritarian durability and democratization.

2.1 Existing Literature

Research on the political economy of agricultural policy has long noted the ironic trend for government price supports for farmers to increase as countries develop and the importance of agriculture in their economies declines. This regularity has been explained by the incentives and abilities of farmers and consumers to organize politically and influence the government. Under the 'development pattern', countries shift from taxation to support of agricultural producers as their average income increases. Under the 'anti-comparative advantage pattern', support increases when farm incomes fall relative to those in the rest of the economy (Swinnen, 2010). As an economy grows, agriculture makes up a declining share of output compared to industry, and food consumption decreases relative to total income levels. Thus opposition to supporting the agricultural sector declines, because of its relatively small size and the low real cost to consumers of increasing food prices. At the same time, relative returns to the sector decline while the number of farmers also decreases, increasing both farmers demand for higher prices and their ability, as a smaller group, to solve the collective action problem and organize to lobby government (Olson, 1965). Subsequent analyses have also highlighted institutional differences among democratic countries which affect agricultural policy-makers' trade-off between producers' and consumers' interests, finding that electoral systems which encourage politicians to appeal to narrow interest groups rather than the broader electorate are associated with higher levels of producer support (Park and Jensen, 2007; Olper and Raimondi, 2011; Weinberg, 2012).

More importantly, countries lacking democratic political institutions have been found to have much lower levels of producer support and lower consumer food prices than democracies, for reasons which are illustrated by Egyptian food policy-making since the 1970s. In 1977, violent mass protests erupted and threatened to overthrow the Sadat dictatorship as a reaction to the elimination of government subsidies for basic foodstuffs and associated food prices increases. Thereafter, the government never questioned its commitment to a pro-consumer policy guaranteeing a virtually limitless supply of low-cost bread to the urban population, even at the expense of decreasing producer prices, relying on foreign food aid and decimating the domestic agriculture sector (Gutner, 2002).

The Egyptian case demonstrates the established wisdom on agricultural and food policy under authoritarian regimes. As famously argued by Lipton (1975) and Bates (1981), authoritarian governments are subject to urban bias in their economic policies, as they discriminate against the rural population in order to cheapen food and non-farm inputs, promote industrialization and enrich urban populations and commercial interests. Democratic governments, on the other hand, are significantly less likely to discriminate against the agricultural sector because they need the support of rural voters in order to win elections and, in contrast to authoritarian regimes, democracies allow for the transfer of real power through electoral institutions. Bates and Block (2013) find that improvements in executive accountability in Africa have been associated with increased price supports in the region, and Olper and Raimondi (2011) show that democratic transitions are associated with increases in support for farmers.

Consider, however, the agricultural policies of Pinochet's military regime in Chile, which replaced the democratically elected socialist president Allende in a 1973 coup. Running directly against their predecessor's policies, which lowered food prices for consumers and expropriated large farms in order to redistribute them as smaller farms to workers, the military leadership followed a producer-friendly course, halted all land reforms, removed protectionist barriers which had caused the prices of farm produce to fall, and by the early 1980s was actively supporting agriculture (Floto, 1979; Valdes, Muchnik, and Hurtado, 1990). For Pinochet's regime, pro-consumer authoritarian agricultural policies as practiced in Egypt were politically untenable, because powerful landowners negatively affected by Allende's policies were a key part of the economic coalition supporting the military government from 1973 (Silva, 1993).

The Chilean experience, contrasted with the Egyptian case sketched above, illustrates the *duality* of the agricultural policy problem for authoritarian leaders which I explore in this paper. Not only can authoritarian leaders face political challengers from the cities, in the form of disgruntled food consumers meeting high prices. They can also face a political threat from pro-agriculture elites, who demand cheap farm inputs such as fertilizer and seed, and a tariff regime which maximizes the prices they receive for farmers' produce. Balancing and addressing these threats is the goal pursued by an authoritarian leader when making agricultural and food policy, and in this chapter I look at the policy effects of variation in political threats among autocratic regimes.

2.2 Explaining Policy Diversity Under Dictatorship

Democratic governments weigh the political support of producers and consumers in terms of campaign contributions and votes, respectively, when making economic policy decisions (Stigler, 1971; Peltzman, 1976). Thus, institutional features which lead politicians to favor narrow producers' interests over those of consumers—such as proportional electoral systems—are associated with significantly higher prices for consumers (Rogowski and Kayser, 2002; Olper and Raimondi, 2013). The economic policy-making process under authoritarian regimes is less well understood, with dictatorships being "too much of a mixed bag" to attempt any general theory of their policies according to one recent account (Chang et al., 2011, 50). Nonetheless, it is clear that, at the least, authoritarian leaders must intervene in the economy in order to avoid economic crises, because these are seen as important precursors to regime collapse. Indeed, more generally, authoritarian regimes have an interest in promoting the interests of specific economic actors who are key supporters of, or threats to, the regime (Haggard and Kaufman, 1997, 267).

As laid out in more detail in Chapter 1, I argue that in the case of interventions in the agricultural sector, it is possible to construct a systematic account of authoritarian governments' policies by identifying those economic groups which are key supporters or pose a threat to a regime due to their structural position in the economy. Following Svolik's (2012) conception of authoritarian politics, I argue that unlike in democracies, where politicians make economic policy decisions weighing the support of rival groups in terms of votes and campaign contributions, a dictator must make decisions based on a grim calculation of the threat posed to their survival by groups with competing interests: producers (elites) and consumers (the masses).¹ Making the economic policy instrument more concrete, I characterize it as a regulation which distorts farm produce and food prices, increasing the income of producers while decreasing the real income of consumers by increasing food prices, or vice-versa, in the way laid out in the familiar Stigler-Peltzman model (Stigler, 1971; Peltzman, 1976).² This sets up the basic dilemma confronting authoritarian regimes

¹ This is a reasonable depiction in many cases: individuals or households are either net food producers or consumers, having opposed interests in agricultural policy. In addition, agricultural producers can make up a powerful elite within a country, but even if they are not *the* political elite in a country, producers are still a smaller group than the mass of food consumers.

 $^{^{2}}$ Treating the policy instrument as a single price-distorting regulation captures the key dynamics of the

when forming agricultural policy. There is an inherent trade-off which policy-makers must make between increasing rents to producers and decreasing the costs of food to consumers. The optimal policy outlines a course of action which minimizes political risks based on the threat which each group poses to the regime.

Authoritarian leaders are acutely aware of latent and manifest threats to their positions. These could come in the form of possible mass uprisings, such as that sparked by the removal of government food subsidies in Egypt in 1977 (Gutner, 2002). Threats can also stem from farmers' position within a regime's support coalition, as in the case of Pinochet's Chile outlined above (Silva, 1993), or from their ability to threaten the country's food security and growth prospects through decreased production, as white commercial farmers did in the early years of Mugabe's government in Zimbabwe (Herbst, 1988). However, insofar as political threats originate from within the agricultural sector, and from food consumers and producers, they hinge on each group's capacity to organize in opposition to the government, and can be addressed in part through policies which increase their real incomes.

In an authoritarian political system where real power is not allocated through elections, the relative threats posed to a regime by competing groups depend on the economic resources at each group's disposal, and their ability to organize in collective action (Olson, 1965). In the case of agricultural producers, I build upon existing work in development studies and comparative politics to show that farmers' political power is enhanced when landholding inequality is high (Ziblatt, 2008a; Galor, Moav, and Vollrath, 2009). In the case of food consumers, I draw on insights from existing work on the political-economic determinants of regime collapse (Smith, 2004) and political instability (Goldstone et al., 2010) to show that consumers' political power is greater when the population is concentrated in cities.

To illustrate, consider the two neighboring countries, Thailand and Malaysia, whose Polity scores (Marshall and Cole, 2011) and agricultural producer support levels from 1960-2005 are compared in Figure 2.1. Both of these South-East Asian states underwent swift economic development during this period, more than quadrupling GDP, though Malaysia did so from a much higher base. In both countries, the share of agriculture in total national

policy-setting process, in which a trade-off must be made between minimizing food costs to consumers and maximizing profits for producers. However, in subsequent empirical analyses assistance to producers and taxes on consumers are separate (though very highly correlated) variables.

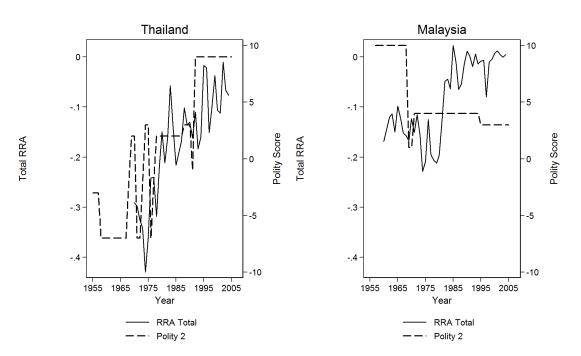


Figure 2.1: Agricultural policy and democracy in Thailand and Malaysia

economic output shrank to around ten percent, from a similar base of around thirty-five percent, indicating that they share a similar comparative advantage in the sector (The World Bank, 2012b). Both countries followed the familiar development and anti-comparative advantage patterns in agricultural policy, decreasing taxes on farmers, but Malaysia consistently followed a more pro-farmer policy than Thailand which cannot be explained away by the country's relative wealth; farmers were subsidized more in Malaysia in 1985 than they were in Thailand in 2005.³

In Thailand, a shift from taxing to price support for farmers followed the country's uncertain moves towards more democratic governance. However, supports were consistently below those in Malaysia, where the development pattern held *despite* a process of authoritarian backsliding after 1965, when the country moved from a fully democratic state to a dictatorship and did not recover until 2008. How can we explain the relatively low price support levels in Thailand and the producer-friendly regime in Malaysia, when they contradict established understandings of the link between agricultural policy, development and democracy?

The reason for these important differences lies in the threats posed to each regime by the structure of their economies and the political power vested in competing groups. Due to their economic and political position, Malaysian farmers posed a credible threat to the regime, especially after 1969. As illustrated by relatively high levels of landholding inequality in Malaysia (a landholding Gini coefficient of 0.68 in 1960, compared to 0.44 in Thailand in 1963 (Frankema, 2010)), fewer farmers own larger farms, on average, in Malaysia, making it easier for them to organize politically and lobby for favorable policies. Thus, large-scale plantation rubber producers and larger rice farmers have been the beneficiaries of government food price policies and rural development schemes since independence. After communal violence in the late 1960s which was seen as a result of ethnic inequality between rural Malays and urban Chinese, agricultural policies were part of the Malaysian New Economic Policy put in place to address ethnic inequality and increase the incomes of Malays relative to the rest of the population, in order to mitigate the threat of further unrest. Importantly, rural Malays and large rice farmers in particular formed a key element of the political support base of the United Malays National Organization,

³ See also Jenkins and Lai (1989); Sayamwala and Setboonsarn (1989) and Anderson and Martin (2009).

the powerful ethnic-based party which is the dominant force within the ruling coalition (Scott, 1985). Thus, not only plantation agriculture but also rice production was heavily supported after 1970, with domestic rice prices well above world market prices (Jenkins and Lai, 1989).

Thai agricultural producers, by contrast, are greater in number and have smaller farms, on average. They have historically been poorly organized and overshadowed by the political influence of urban commodity traders with direct links to powerful policy-makers. Thai farmers, who predominantly produce rice, do not pose a risk to the regime and thus have received relatively low levels of producer price supports (Sayamwala and Setboonsarn, 1989). Thai food consumers have consistently posed a greater risk to the regime than food producers. In 1985, 36% of the Thai population lived in Bangkok, the country's largest city, compared to only 14% of the Malaysian population living in Kuala Lumpur (The World Bank, 2012b). Malaysia and Thailand illustrate the duality of the agricultural policymaking problem for authoritarian leaders and show that not all authoritarian regimes make identical policies.

2.3 Data: Measuring Agricultural Policy and Political Threats

2.3.1 Dependent Variables

I run panel regressions on government policy data collected in an international World Bank research project (Anderson and Valenzuela, 2008; Anderson and Nelgen, 2012). Around three thousand country-years are included from the period 1955-2010. The coverage of the data is not evenly spread across space and time: developed democracies are conspicuously over-represented due to their importance to global agricultural trade. The former Soviet Union, socialist Eastern Europe and the Middle East are notably under-represented due to their lack of significant food exports. However, the data are a great improvement over previous datasets, covering all regions, and including countries which account for 92% of global population, and a wide variety of political systems.

The Anderson and Nelgen (2012) data estimate the direct and indirect effects of domestic

government policy on the price incentives faced by farmers and food consumers. These policies include tariffs and trade measures, producer and consumer price distorting measures, exchange rate policy, distortions to intermediate input prices and post-farmgate costs such as those imposed by state marketing monopolies (Anderson et al., 2008). The variables in the dataset measure policy by relating domestic prices to world market prices, summarizing aggregate national policy for each country-year in measures which are productionand consumption-weighted to capture the total effects of agricultural policy within a given economy.

I analyze producer policy using the *Relative Rate of Assistance* (RRA) to total farm output, the proportion by which agricultural output prices are increased (or decreased if negative) relative to non-agricultural output prices. Using this variable, rather than the *Nominal Rate of Assistance* (NRA), allows me to look specifically at agriculture and the real effects of government policy on the sector, removing the confounding influence of any general government anti-trade bias on agricultural policy. I analyze consumer policy using the *Consumer Tax Equivalent* (CTE), the proportion by which domestic consumer food prices are above (or below if negative) the international prices of like products.

These variables can logically vary between negative one (prices are reduced to zero) and any positive value (by which proportion prices are increased). For example, if a country's RRA value in a given year is 0.5, government policy increases producer prices by fifty percentage points above the price increases seen in other sectors. If the same country's CTE value in the same year is -0.5, it decreases consumer prices by fifty percent. It is worth noting that this is an unlikely combination of policies, because it leaves the government paying a very large 'wedge' or difference between producer and consumer prices. On the whole, governments avoid placing themselves in this situation and the RRA and CTE variables are highly correlated in the World Bank dataset (r = 0.89), as governments pass on the costs of a given policy which favors producers to consumers, and vice versa.

The extent of government intervention in the agricultural sector varies widely across and within regions. Among developed countries, East Asian governments such as those in South Korea, Japan and Taiwan intervene very heavily in their agricultural sectors to increase prices for producers, as do Scandinavian governments, Switzerland and members of the European Union under the Common Agricultural Policy. Australia, New Zealand, South Africa, Canada (the "Cairns Group" of free-trading agricultural exporters at the WTO) and the United States have relatively low levels of distortions to agricultural prices. Governments in developing regions such as South Asia and Africa tend to decrease farmers' produce prices. In a naive comparison, democracies also subsidize farmers more than authoritarian regimes; in the 1990s the average democracy increased farm produce prices slightly compared to world market prices, while the average autocracy or anocracy decreased them by around 20%.

2.3.2 Independent Variables

The empirical estimation of the relationships outlined above, between elite (producer, E) and mass (consumer, \mathbf{M}) threats and policy, requires the construction of measures of the political threats posed to a regime by these two groups. In this study, I use landholding inequality to measure the intensity of producer threats to a regime, while urbanization and income inequality measure consumer threats. These independent variables are not completely free of endogeneity problems, most importantly that of reverse causality. As recent research by Wallace (2013) has shown, urbanization under authoritarian regimes is itself a function of producer support levels in agriculture, as lower price supports lower rural incomes and provide an incentive for rural-urban migration. It is also plausible that landholding inequality could be influenced by producer support levels, as higher subsidies tend to disproportionately benefit larger landowners, who could increase their holdings with this greater income. However, as Wallace makes clear, agricultural policy only causes significant increases in urbanization in the long run, over periods of decades. And landholding inequality has been found to change only very slowly over time (Vollrath, 2007). Therefore, in any given year, these structural features of an economy are independent of effects of policy and must be taken as indicators of an exogenous threat by an authoritarian government. By using these structural, slow-moving variables I minimize the risk of reverse causality in my empirical results.

Producer Threats E

To capture the political threat of landowning agricultural producers, I use a Gini coefficient measuring the inequality of land ownership in a country. I predict that landholding inequality will be associated with higher levels of producer subsidies in dictatorships. Democratic governments have been found by Olper (2007) to respond to the interests of food-consuming constituents and to provide lower levels of producer price supports when landholding inequality is high, as a form of redistribution to the median voter. I predict the relationship to be starkly different under authoritarianism, as authoritarian leaders are only responsive to constituencies that can organize in opposition to their government. The distribution of land ownership within a society is an important measure of the autonomy of agricultural producers and the political threat which they can pose to an autocratic regime for three reasons. First, as the Gini coefficient increases, the number of landholding agricultural producers declines, and they find it easier to solve the collective action problem and organize politically to pursue their interests.⁴ Therefore, a higher level of landholding inequality should be associated with a greater political threat posed by landowning elites. This is similar to the Olsonian (1965) logic appealed to by Anderson and Hayami (1986) and others in explaining the correlation between a smaller agricultural sector and producer subsidies in democratic states, but applied at the level of land ownership, rather than at the sectoral level. Second, the distribution of land ownership, rather than the size of the agricultural sector, is important under dictatorship because of the strong correlation between land inequality and authoritarianism found by empirical studies of the determinants of democratization (Ziblatt, 2008a). Large landowners often take on an important position within dictatorships, as hard-liners opposed to reform. Third, the ownership of land, especially large farms, has long been associated with political influence. Large landowners have traditionally held privileged positions in local political organizations and the church (Anderson, 2000), and landlords can use their position to control the political activities of their tenants and workers (Baland and Robinson, 2012).

⁴ This is not true in the case of Socialist dictatorships. In states where agricultural land has been collectivized, levels of landholding inequality are extremely high because the state effectively owns all productive land. This obviously does not lead to greater autonomy of farmers. However, the World Bank dataset on agricultural distortions does not include Socialist dictatorships, except China, where landholding inequality remains low. Therefore, I do not see this as a problem in my empirical analysis.

Data measuring land inequality are not evenly distributed across space and time. The Food and Agriculture Organization of the United Nations (FAO) has published national summary statistics on the distribution of land holdings since the 1950s but the inclusion of each country's results was dependent on the successful completion and publication of national agricultural censuses and coverage is sporadic in many developing countries. Nonetheless, the decennial FAO reports provide a homogeneous source for the calculation of national landholding Gini coefficients, because the data in country reports are collected under a consistent set of criteria. No single dataset has calculated all the landholding Gini coefficients available from the FAO data, therefore I make use of three datasets which utilize the same underlying data and maximize the number of observations I can include in my analysis: Erickson and Vollrath's (2004) study which extends the Deininger and Squire (1998) dataset by twelve observations, plus additional observations from Frankema's (2010) study and those published by the FAO (1997a).⁵

Data for land inequality are not available for every country included in the Anderson and Nelgen (2012) dataset. Notably, Russia, Central Asia and Eastern Europe are not included in the landholding inequality dataset, but these areas are not well represented in the agricultural policy dataset either because they enter only after 1989. In addition, some countries are included with as many as seven observations in the dataset (Pakistan and India; OECD countries have five or six), while eleven others have only one data point (eight African nations, China, Mexico and Slovenia). For countries with more than one observation, I linearly interpolate them and perform an extrapolation them to fill out the missing country-years, censoring any values which result so they do not exceed the maximum found in the original data (0.98).⁶ For countries with only one observation, I use that value for all country-years from 1955-2007. The resulting data are obviously problematic, because the distribution of land within a country can change over time, and can even change rapidly when affected by land reforms. However, in most cases levels

 $^{^{5}}$ I am grateful to Dietrich Vollrath for kindly providing me access to his data, which are not publicly available. Results from the 2010 round of agricultural censuses are not yet available.

⁶ The extrapolation is the fitted value of a regression of the interpolated values on country dummies interacted with a linear time trend. I prefer this to a simple extrapolation, because the resulting values do not simply continue a linear trend in the data, but model the tendency of each country's land Gini to change over time. Values are thus less likely to tend towards very high or very low values. I also report results from models including only the interpolated data, and random-effects models, in Table 2.3 as a robustness test.

of land inequality change only very slowly over time (Erickson and Vollrath, 2004), and the sparse coverage of the data leave few alternatives to this strategy.⁷ As a robustness test, I also estimate one set of models which includes only the interpolated data, not interpolations—that is, data interpolated between data points from two FAO agricultural censuses.

Taking the resulting data, the mean landholding Gini coefficient between 1955-2007 was 0.60. The highest average levels of land inequality were to be found in Oceania (Australia and New Zealand) and South America where the average coefficients are 0.84 and 0.83, respectively. The lowest levels of land inequality in the dataset are in East Asia, with an average coefficient of 0.43. The lowest overall value was in Sweden in 1971, with a coefficient of 0.29. On average, the dictatorships included in the dataset have slightly lower landholding Gini coefficients than democracies (0.59 compared to 0.63).

Consumer Threats M

To measure the threat of food consumers to a dictatorial regime, I use the proportion of a country's population living in cities, data which is available annually for many countries from the World Development Indicators (The World Bank, 2012b). The political importance of the level of urbanization in a state is laid out explicitly by Bates (1983, 121-122). Urban consumers are very sensitive to changes in their real incomes, for example those due to shifts in food prices, and cannot produce any food themselves. Food makes up a large proportion of many urban dwellers' budgets in low-income dictatorships, and when this segment of the population airs its grievances over standards of living, they typically center on food affordability. Urban consumers are willing and able to quickly mobilize to defend their economic interests and protest against high food prices and government policies which result in high food prices (Bates, 1983, 121). I therefore predict that higher

⁷ An alternative measure of rural inequality, the Vanhanen (2003) measure of family farms as a proportion of total agricultural holdings used by Boix (2003), is unsuitable because it does not capture the distribution of actual landholdings across the population. It is thus unclear what the interpretation of the data should be for my purposes. For example, Australia would be considered relatively 'equal' by the Van Hanen data, because a high proportion of its farms are family-owned. However, following a Gini coefficient Australia is characterized by one of the most unequal distributions of landholdings in the world, because farms are very large and small in number, while the majority of the population live in cities and own, at best, only tiny parcels of land. For the purposes of my study, which needs a variable capturing the relative concentration and wealth of agricultural producers, a Gini coefficient is the only suitable measure.

levels of urbanization will be associated with lower levels of producer support, as well as lower levels of consumer taxes, under dictatorship than under democracy.

One socio-economic factor which can mitigate the political threat of urban food consumers is income inequality that, in contrast to the effect of landholding inequality on farmers' political power, weakens the likelihood of collective action by food consumers. This is because income inequality does not decrease the total number of food consumers in a country but creates divisions among an existing number of consumers and decreases the likelihood of opposition to rural-biased policies. According to Engels' Law, the income elasticity of demand for food is less than one, so that as household income increases, a decreasing proportion is spent on food (Houthakker, 1957). Therefore, the real costs to poorer households of food price increases are higher than those to richer households (Myers, 2006), and the benefits to collective action in opposition to higher food prices are less for richer households than for poorer households. Because income inequality does not imply a smaller and more homogeneous group of food consumers, but makes the benefits of political opposition to many rich consumers negligible, it decreases the likelihood of consumers' collective opposition to an authoritarian regime (Runge, 1986; Baland and Platteau, 1997). I therefore predict that higher levels of income inequality will be associated with higher food taxes and producer subsidies under dictatorship.

In my models, I use the 2008 version of the Estimated Household Income Inequality dataset from the University of Texas Inequality Project (Galbraith and Kum, 2005). This dataset includes 3,419 Gini coefficients for 153 countries between 1963 and 2002, with a mean Gini of 0.39, a minimum of 0.20 and maximum of 0.64. The coefficients are estimates of gross household income inequality, computed from a regression relationship between the Deininger and Squire (1998) inequality measures and the UTIP-UNIDO industrial pay inequality measures (University of Texas Inequality Project, 2003), controlling for the source characteristics in the original inequality data and for the share of manufacturing in total employment.

2.3.3 Regime Type Indicators and Control Variables

In order to examine the policy differences between democracies and authoritarian regimes, and among different authoritarian regimes, I interact my key explanatory variables with

Variable	Ν	Mean	Median	Std. Dev.
RRA	2,854	0.10	-0.01	0.57
CTE	$3,\!219$	0.20	0.07	0.55
NRA	$3,\!095$	0.19	0.05	0.50
Polity 2	$3,\!651$	3.01	7.00	7.25
Dict. (Polity)	$4,\!178$	0.40	0.00	0.49
Dict. (Prz.)	$3,\!681$	0.46	0.00	0.50
Urbanization	$3,\!452$	0.50	0.52	0.24
Log Pop. Density	$3,\!663$	3.90	4.03	1.25
Pop in cities $> 1m$ pop.	$3,\!240$	0.18	0.15	0.12
Inequality	1,968	0.39	0.39	0.07
Land Gini	$3,\!579$	0.60	0.57	0.16
$\log \text{GDP}$	$3,\!394$	7.71	7.67	1.71
Log Ag/GDP	$2,\!861$	-2.14	-1.94	1.05
GDP Growth	$3,\!315$	0.02	0.02	0.05
Food Index	3,828	136.29	136.19	41.13

Table 2.1: Summary Statistics of Variables

regime type indicators. I do this in three ways. First, I use a dummy variable created from the Polity dataset (Marshall and Cole, 2011), which indicates whether a country's Polity score is below six, and it is not a democracy. Second, I use the Cheibub, Gandhi, and Vreeland (2010) dataset's binary variable indicating whether a country is a democracy or a dictatorship. Third, I use a country's Polity 2 score (Marshall and Cole, 2011) as a continuous indicator, which ranges from -10 (fully institutionalized autocracy) to 10 (fully institutionalized democracy).⁸

The models below also control for all major existing results in the literature on the political economy of agricultural policy. I include measures of GDP, agriculture's share in GDP and GDP growth, to account for the development and anti-comparative advantage patterns outlined above, with data from the World Bank World Development Indicators (The World Bank, 2012b). I also include these variables' interactions with the regime

 $^{^{8}}$ In these models, I do not look at institutional regime *type*, for example military regimes versus singleparty regimes. I include these variables in similar regressions in Chapter 3 and show that these regime type indicators have only small effects on agricultural policy compared to the measures of political threats examined here.

type indicators to account for the differential effects of growth under democracy and authoritarian regimes. Because agricultural policies tend to move in close conjunction with world commodity prices, I control for changes in policy determined by international market movements by including a yearly international food index variable from the World Bank's commodity report "Pink Sheets" (The World Bank, 2012a). All the results presented in this chapter are also robust when controlling for agricultural land per capita and arable land per capita, which could possibly be correlated with landholding inequality. I also include the proportion of a country's population living in cities with a population of over one million, as well as the natural log of a country's total population. Summary statistics of all variables included in the models are shown in Table 2.1.

2.4 Model Specification and Results

In order to estimate the correlation between political threats and agricultural policy, I specify fixed-effects panel regressions of the following form,

$$E[y_{i,t}|\mathbf{x}_{i,t}, \mathbf{E}_{i,t}, \mathbf{M}_{i,t}] = \beta_1 + \beta_2 \mathbf{x}_{i,t} + \beta_3 \mathbf{E}_{i,t} + \beta_4 \mathbf{M}_{i,t} + \nu_i + \epsilon_{i,t},$$

where $y_{i,t}$ measures policy, β_1 is a constant, $\mathbf{x}_{i,t}$ is a vector of control variables which vary over countries and time, $\mathbf{E}_{i,t}$ is a vector measuring elite (producer) threats which vary over countries and time, $\mathbf{M}_{i,t}$ is a vector measuring mass (consumer) threats which vary over countries and time, ν_i is an unobserved, time-invariant unit effect, and $\epsilon_{i,t}$ is an idiosyncratic shock, which varies over countries and time. Because a Hausman test indicates that the panel-level unobservable effects ν_i are related to the regressors $\mathbf{x}_{i,t}, \mathbf{E}_{i,t}, \mathbf{M}_{i,t}$, or that unobserved country-specific factors are correlated both with policy outcomes and the independent variables included in the model, I run fixed-effects regressions which model out the parameter ν_i by removing unit-level means from the data. I also specify the model with robust standard errors clustered by country, in order to allow for the idiosyncratic errors $\epsilon_{i,t}$ to be non-identically distributed across units. Results of six fixed-effects regressions, taking both producer and consumer policy as dependent variables and including all three specifications of the regime type indicator, are presented in Table 2.2. The policy variables $y_{i,t}$ are the annual measures of producer subsidies (RRA) and consumer taxes (CTE) for each country discussed above.

Threats
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Agricultural
Table 2.2:

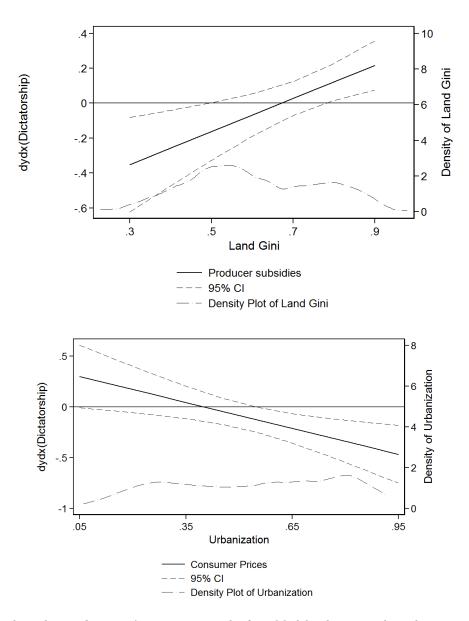
	(1) RRA	~	$^{(2)}_{ m RRA}$	A	(3) RRA	, V	(4) CTE	Ē	(5) CTE	_ 12	(6) CTE	Ē
Dict. (Polity) Dict. (Prz.) Polity 2	-0.80	(0.55)	-0.73	(0.65)	0.08*	(0.04)	-1.38*	(0.72)	-0.26	(0.82)	0.08*	(0.04)
Urban. Urban. (Politv)	1.50^{***} - 1.07^{***}	(0.55) (0.30)	1.64^{***}	(0.58)	0.93	(0.60)	0.91- $0.85***$	(0.55) (0.31)	1.21^{**}	(0.57)	0.23	(0.56)
Urbaniz.*Dict. (Prz.) Urbaniz.*Polity			-1.14**	(0.30)	0.07***	(0.02)			-1.18***	(0.30)	0.08^{***}	(0.02)
Inequality (EHII) Ineq.*Dict. (Polity)	-0.99^{**} 1.19**	(0.46) (0.57)	-0.93*	(0.50)	-0.39	(0.35)	-1.38^{*} 1.66^{*}	(0.76) (0.84)	-0.88	(0.69)	-0.31	(0.37)
Ineq.*Dict. (Prz.) Ineq.*Polity		~	1.12^{*}	(0.65)	-0.07	(0.05)		~	0.83	(0.85)	-0.10^{*}	(0.05)
Land Gini Land G.*Dict. (Polity)	0.28 0.95^{***}	(0.72) (0.30)	0.40	(0.68)	1.02	(0.62)	0.05 1.00^{***}	(0.70) (0.30)	0.12	(0.66)	0.89	(0.57)
Land G*Dict. (Prz.) Land G.*Polity		~	0.75^{**}	(0.29)	-0.04*	(0.03)		~	0.75^{***}	(0.26)	-0.05**	(0.02)
Ln Pop Dens. Pop. Densitv*Dict. (Politv)	-0.02 0.03	(0.80) (0.05)	-0.30	(0.93)	-1.31	(0.95)	-0.96 0.05	(0.82) (0.05)	-0.89	(1.04)	-0.67	(0.71)
Pop. Density*Dict (Prz.) Pop. Density*Polity			-0.00	(0.05)	-0.01	(0.00)			-0.01	(0.05)	-0.00	(0.00)
Log GDP GDP*Dict. (Polity)	0.11 -0.06	(0.11) (0.06)	0.15	(0.12)	0.11	(0.10)	0.15 - 0.04	(0.13) (0.06)	0.22	(0.14)	0.15	(0.11)
${ m GDP*Dict.}$ ${ m (Prz.)}$		~	-0.04	(0.05)	0.00	(0.00)		~	-0.11*	(0.06)	0.00	(0.00)
Log Ag/GDP Ag GDP*Dict. (Polity)	0.13 - 0.28^{***}	(0.09) (0.07)	0.17	(0.10)	-0.12	(0.08)	0.30^{***} - 0.27^{***}	(0.09) (0.08)	0.38^{***}	(0.11)	0.04	(0.08)
Ag GDP*Dict. (Prz.) Ag GDP*Polity		~	-0.32***	(0.10)	0.03^{***}	(0.01)		·	-0.39***	(0.11)	0.03^{***}	(0.01)
Observations	1238		1238		1220		1267		1267		1249	
F N clust	133.47		149.42 49.00		64.32 49 00		88.71 52.00		38.82 52.00		21.09	

* p < 0.10, ** p < 0.05, *** p < 0.01All models with country fixed-effects and clustered standard errors

The results of the regressions presented in Table 2.2 show that significant differences exist among authoritarian regimes which are not explained by a country's level of development or the size of its agricultural sector. Variables capturing development and the comparative advantage of the agricultural sector are signed as in previous studies. The coefficient on the *Log GDP* variable is positive, though insignificant. Under less democratic regimes where the agricultural sector is larger, support levels are lower, holding all else constant. These are well-established findings. However, new insights into the political economy of agricultural policy under authoritarianism are revealed by the significant correlations between variables measuring political threats and policy outcomes, while holding both the development and anti-comparative advantage patterns constant.

These threat variables and their interactions with regime type are statistically significant and signed as hypothesized above. Producers' threats, captured by landholding inequality, are not significantly correlated with farm subsidies under democracies, but positively correlated with producer support under dictatorships. The differences among authoritarian regimes are large enough to revise previous findings of significantly lower levels of subsidies under authoritarian governments compared to democracies. The marginal effect on producer price supports of a government being authoritarian, rather than democratic, is negative and statistically significant at low levels of landholding inequality. Holding all else constant, in a country with a land Gini of 0.3, an authoritarian government is predicted to provide price supports to farmers 35 percentage points lower than a democracy, compared to world market prices. In a country with a land Gini of 0.6, on the other hand, an authoritarian government is predicted to subsidize agriculture 12 percentage points *more* than a democracy. This relationship, from Model (1) in Table 2.2, is graphed in Figure 2.2.

This result revises the established findings on comparative agricultural policy by showing that in states with a relatively equal distribution of small landholdings, government policies towards farmers are even more likely to tax their produce than previous studies have found, reducing the income of households which are net producers of food and exaggerating policies which distort global trade and reduce economic growth. On the other hand, in states where land is relatively unequally distributed among a smaller group of large landowners who can more effectively pose a threat to an authoritarian government, policies towards farmers are not significantly more likely to reduce their returns under authoritarian regimes than under



Upper panel graphs **producer price support** results from Model 1, lower panel graphs **consumer food tax** results from Model 4, Table 2.2.

All figures, including confidence intervals, are created using the Margins package in Stata. Zero line indicates effect of independent variables under democracy.

democracies, and at very high levels of landholding inequality can even provide higher farm prices than democracies. 9

Turning to urbanization, the variable measuring the capacity of food consumers to pose a threat to an authoritarian regime, the models in Table 2.2 produce the predicted and diametrically opposed negative correlation with food taxes under dictatorship, as illustrated in Figure 2.2. Higher levels of urbanization are, holding all other variables constant, significantly correlated with lower levels of producer subsidies (Models 1-3), and consumer food taxes (Models 4-6), under dictatorship than under democracy. This follows the established findings of scholars since Lipton (1977) and Bates (1983) who have argued that governments in developing countries tend to be 'urban biased' and discriminate against food producers in pursuing the goal of low food prices for city food consumers, but it shows that this relationship holds only at high levels of urbanization, and is stronger under dictatorships than democracies. At low levels of urbanization, below 0.5, the marginal effect of regime type on food taxes is statistically insignificant in Model (4), indicating that authoritarian regimes are not more likely to decrease consumer food prices than democracies. However, as the political threat of consumers increases at levels of urbanization above 0.55, a significant and increasing policy difference between democracies and dictatorships emerges. At levels of urbanization one standard deviation above the mean (0.75), an authoritarian regime lowers consumer food prices by 30 percentage points relative to a democracy.

The correlation between income inequality and consumer food taxes is positive and statistically significant under dictatorship, indicating that when consumers' interests are not divided and they are better able to organize in opposition to rising food prices, authoritarian governments are less likely to impose taxes on food in response to this threat. At low levels of income inequality, below the mean of 0.39, authoritarian governments impose significantly lower taxes on food than democracies in Model (4), as graphed in Figure 2.3. The marginal effect of a country being ruled by an authoritarian regime is a 28 percentage point reduction in food taxes, on average, when inequality is one standard deviation below the mean. At mean levels of income inequality and above, authoritarian regimes are no less likely to impose food taxes on consumers than democratic governments.

⁹ Olper (2007), using an older dataset covering less country-years, finds that landholding inequality is negatively associated with producer price supports; my results confirm this finding for democracies only, and show that the relationship is reversed under authoritarianism.

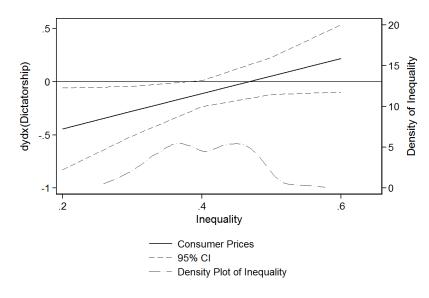


Figure 2.3: Income Inequality and Food Taxes, Democracy versus Dictatorship

Zero line indicates effect of inequality under democracy as a reference.

The results reported in Table 2.2 confirm, firstly, that agricultural policy is made by different rules under authoritarian regimes than it is under dictatorship. Authoritarian governments respond to structural threats to their rule in a way which democratically elected governments do not. Thus, the presence of a small group of large-scale farmers does not have a significant effect on policy in democracies, but such politically powerful economic actors are able affect policy and receive higher levels of producer subsidies under authoritarianism. Similarly, the distribution of the population in town or country does not significantly affect policy under democracy, but large concentrations of price-sensitive consumers do pose a threat to an authoritarian government and receive lower food taxes. However, more importantly, they show that policy is not homogeneous among dictatorships. Not all authoritarian regimes are urban-biased and strip resources from the agricultural sector in order to fund industrialization projects, as Bates (1983) famously found for African cases. In fact, agricultural policy under authoritarian regimes depends on the relative threats of producing elites and the food-consuming masses, and in countries where a small group of landed elites pose a significant threat to a regime, farm policy can actually be

Model results from Model 4, Table 2.2.

more producer-friendly under authoritarianism than democracy.

Table 2.3: Robustness Tests: Interpolated Land Gini Data and Random-Effects Models

	(1))	(2))	(3))	(4))
	RR		CT	E	RR	А	CT	E
Dict. (Polity)	-1.40**	(0.54)	-1.98**	(0.74)	-0.58	(0.44)	-1.27**	(0.64)
Urban.	1.45	(0.86)	1.03	(0.86)	0.74^{**}	(0.29)	0.67^{**}	(0.33)
Urbaniz.*Dict. (P)	-1.36^{***}	(0.39)	-1.15^{***}	(0.41)	-1.33^{***}	(0.29)	-1.16^{***}	(0.25)
Inequality (EHII)	-1.09**	(0.54)	-1.45	(0.98)	-1.35***	(0.43)	-1.79^{**}	(0.73)
Ineq.*Dict. (P)	1.61^{**}	(0.64)	1.72	(1.08)	1.65^{***}	(0.49)	2.24***	(0.78)
IP Land G.	-1.09*	(0.61)	-1.01	(0.77)				
Land Gini					-0.92***	(0.21)	-0.75***	(0.28)
IP Land G.*Dict. (P)	1.41^{***}	(0.42)	1.43^{***}	(0.41)				
Land G.*Dict. (P)					1.11^{***}	(0.20)	1.10^{***}	(0.21)
Ln Pop Dens.	0.55	(0.81)	-0.98	(0.97)	0.17^{***}	(0.04)	0.04	(0.05)
Pop. Density*Dict. (P)	0.08	(0.06)	0.09	(0.06)	-0.04	(0.03)	-0.00	(0.04)
Log GDP	0.04	(0.15)	0.16	(0.16)	0.11	(0.07)	0.11	(0.09)
GDP*Dict. (Polity)	-0.08	(0.07)	-0.04	(0.07)	-0.09*	(0.05)	-0.06	(0.06)
Log Ag/GDP	0.17	(0.12)	0.40^{***}	(0.12)	0.10	(0.08)	0.26^{***}	(0.08)
Ag GDP*Dict. (P)	-0.39***	(0.14)	-0.42***	(0.15)	-0.29***	(0.08)	-0.27***	(0.09)
Observations	896	. ,	913	. ,	1238	. ,	1267	
F	29.64		37.56					
N_clust	42.00		44.00		49.00		52.00	

Standard errors in parentheses

* p < 0.10, ** p < 0.05, *** p < 0.01

Models (1,2) with country fixed-effects and using interpolated land Gini data only

Models (3,4) using random-effects estimator and including regional dummy variables (not reported)

I run four additional models as robustness tests, and report the results in Table 2.3. First, I re-estimate Models (1,4) from Table 2.2 but I do not use the extrapolated land inequality data described above. Instead I use only data which is interpolated between two values from the FAO land Gini coefficients in order to maximize confidence in the data. I therefore exclude countries from the dataset entirely in the case that only one data point was available, and I exclude all extrapolated values. The results of these fixed-effects models are reported as Models (1) and (2). Second, I re-estimate Models (2) and (4) from Table 2.2 but using a random-effects estimator. These models estimate the mean of the dependent variable conditional on the covariates and the unobserved heterogeneity across countries. Unlike the fixed-effects regressions, they assume that there is no relationship between unobserved country-specific factors and the independent variables. The random-effects models or between idiosyncratic shocks and the independent variables. The random-effects models are especially important robustness tests given that the independent variables of interest move only slowly over time. The results of these random-effects models are reported as Models (3) and (4).

The results reported in Table 2.3 confirm those in previous models. After excluding all extrapolated land Gini observations, a large and statistically significant positive correlation between landholding inequality and producer subsidies remains under dictatorship. Using a random-effects estimator the statistically significant negative relationship between urbanization and food taxes still holds under dictatorship. Inequality is still positively and significantly correlated with food taxes. And higher levels of landholding inequality are significantly correlated with higher producer support levels under dictatorship. These models do not add new insights to those presented in Table 2.2, but lend confidence to the existing results.

2.5 Conclusion

In this chapter, I drew out the implications of my application of the Stigler-Peltzman framework to the authoritarian context in Chapter 1 to revise monolithic conceptions of agricultural policy under authoritarianism. Previous research finds that all autocracies respond to consumers' interests by systematically distort agricultural market incentives to lower producer and consumer prices compared to democracies. By contrast, I argue that authoritarian leaders make agricultural policy by making a grim calculation of the relative threats to their regime posed by *both* producers and consumers. Agricultural policy-making under authoritarianism can be explained as a response to these political threats. In some cases, for example when land inequality is very high, urbanization very low, or inequality is high, farm policy is no more consumer-biased under dictatorship than under democracy. On the other hand, when land inequality is very low, income inequality is high or urbanization is high, dictatorships are more likely to distort market prices to the advantage of consumers, as established by previous studies.

Interventions in the agricultural sector are an important and continuing hurdle for development in low-income countries. In addition, their distortionary effects in world trade further reduce agricultural production incentives and welfare across the globe. Furthermore, interventions in the agricultural sector have significant effects on patterns of rural-urban migration and political instability. It is therefore important to note that not all authoritarian regimes are more likely to tax agriculture than democracies. In order to understand agricultural policy and its economic and political effects globally, it is necessary to approach the question armed with a theory of authoritarian politics and how economic policy is made under authoritarianism. This reveals differences among dictatorships which are as important as those between dictatorships and democracies, and which have significant effects on global trade and political instability.

In the rest of this dissertation, I investigate more fully the relationship between agricultural policy and authoritarian regime durability. In Chapter 3, I do not use structural proxies for the political threats of producers and consumers as in this chapter, but look at the relationship between actual regime instability and agricultural policy. Chapters 4 and 5 are case studies of two rural-biased regimes, Imperial Germany and Malaysia. I show how policies which increased the incomes of farmers at the expense of food consumers were important responses to intra-elite conflicts and contributed to regime stability in the two countries.

Chapter 3

Agricultural and Food Policy as a Tool of Authoritarian Power-Sharing and Control

In Chapter 1, I adapted the Stigler-Peltzman framework to give an account of agricultural policy-making under autocratic governments. I argued that authoritarian governments manipulate agricultural policies in order to address political threats and maximize their tenure in power. Through a wide range of border and domestic policies such as import tariffs, export tariffs, consumer food taxes and farm input subsidies, authoritarian governments can have a large impact on the price incentives faced by farmers and consumers in agricultural markets (Anderson et al., 2008). Although they have most commonly been found to intervene in food markets in order to solve the problem of authoritarian control and address *mass threats* by lowering food prices for urban consumers, this is only one half of the dictator's agricultural policy dilemma in my account. In some cases, such as the early years of Mugabe's rule in Zimbabwe, autocratic governments pursue policies which solve the problem of authoritarian power-sharing and address *elite threats*, increasing the price of farm produce above market equilibrium in order to placate powerful rural interests (Herbst, 1988). In Chapter 2, I tested my argument on the determinants of agricultural policy under authoritarianism. I showed in a cross-national analysis that agricultural policy among authoritarian regimes varies in the face of competing political threats, and that

when producer threats are acute autocracies do not significantly lower food prices compared to democracies. I thus presented evidence that authoritarian leaders are faced with a policy trade-off between the interests of the food-consuming masses and food-producing elites, with the former preferring lower prices and the latter preferring higher prices. They make this trade-off by weighing the political threats of each of these groups and addressing these threats through policies which increase the real income of that which is the most threatening to their regime.

The second step of my argument in Chapter 1 is that agricultural policy has an effect on authoritarian regime stability. By calculating and addressing the threats of consumers and producers, authoritarian leaders can co-opt threatening groups into their regime and maximize their tenure in power. Agricultural policy and authoritarian regime stability are therefore linked by a feedback mechanism. Policy is a function of threats to a regime's stability, while having a simultaneous effect on the magnitude of these threats.

The goal of this chapter is to model this feedback mechanism empirically. I estimate the short-term relationship between threats and policy using simultaneous equations, because the findings from separate models of policy and regime instability are biased.¹ I estimate three simultaneous equation models of the relationship between agricultural policy and regime instability, differentiating between instability caused by consumers in the form of urban unrest, and that caused by producers in the form of elite-driven regime transitions. I find that increasing agricultural and food prices increases the risk of urban unrest while decreasing the risk of an elite-driven regime collapse, providing further empirical evidence for the policy trade-off between consumer and producer interests posited in Chapter 1. The likelihood of an elite-driven transition is correlated with a policy response in the form of an increase in producer price supports, while the likelihood of urban unrest is not correlated with significant agricultural price reductions.

The findings presented in this chapter are the first close look at the relationship between agricultural policy and authoritarian regime durability. The argument that lower food prices lead to political stability under autocracy is implicit, but not empirically assed, in

¹ I say that these are models of the *short-term* relationship between policy and regime stability, because I am assuming that socio-economic variables such as GDP and population density are not affected directly by agricultural policy in any given year. This may not be a realistic assumption in the long term as agricultural policy affects growth in the sector or rural-urban migration, for example.

works such as those by Lipton (1975) and Bates (1983). Wallace (2013) finds a negative correlation between urban-biased agricultural policies and regime failure, but his models do not include controls for development and other relevant variables and his results are relatively weak. I estimate models which include more relevant control variables, and account for the simultaneous relationship between policy and regime stability. In addition, I distinguish between types of unrest caused by consumers and elites, as these groups have diametrially opposed interests in agricultural policy and should respond to similar market distortions in different ways. I show that agricultural policy-making under authoritarianism involves a trade-off between the interests of competing economic groups, not a one-dimensional mechanism which privileges the urban food consuming masses. In fact, my results suggest that urban-biased policies of undemocratic governments are not a function of the threat of urban unrest but of other regime characteristics which render them unresponsive to the interests of rural farmers.

3.1 Previous Literature: Agricultural Policy and Authoritarian Regime Durability

As I argued in Chapter 1, the agricultural sector presents a policy dilemma for authoritarian leaders. On the one hand, agriculture plays a prominent role in their economies: in 2009 it made up a nine percent greater share of total output in undemocratic polities than in democracies, on average, and in 1989 the average authoritarian regime had nineteen percent more employment and output in the agricultural sector than the average democracy. On the other hand, the bulk of the public under authoritarianism expends a larger proportion of its income on food than consumers in democracies. In 2009, inhabitants ruled by undemocratic regimes spent nine percent more of their total consumption expenditure on food than inhabitants of democracies, on average.² Agricultural policy-making under authoritarianism thus addresses a distributional conflict between farmers, who are a major group in terms of employment, output and tax revenue, and consumers, who are very sensitive to food price increases which negatively impact their standard of living.

 $^{^{2}}$ Author's own calculations based on data from Marshall and Cole (2011); The World Bank (2012b); Statistisches Bundesamt (2013); Economic Research Service, USDA (2011). Authoritarian regimes are those with a Polity score lower than six.

Economists have long noted the importance of authoritarian politics for farm policy. Authoritarian regimes have been found to support agricultural prices less than democracies, on average, in order to follow urban-biased policies which lower the price of food for urban consumers.³ This is put down to the political impotence of rural citizens under autocracy (Swinnen, 2009), but also to the acute threat of mass unrest in cities which lends force to consumers' demands for low food prices (Wallace, 2013). In the distributional conflict between farmers and consumers, the interests of consumers have therefore been found to be systematically privileged over those of farmers by authoritarian regimes.

However, scholars of comparative authoritarianism have paid little attention to the importance of economic policies, such as those affecting agriculture, for authoritarian politics. Theories of the political economy of authoritarian regimes such as those by Wintrobe (1990, 1998) and Gandhi and Przeworski (2006) do not provide a useful framework for the analysis of economic policy under autocracy, while comparative research on regulation and economic policy in democracies, for its part, regards authoritarian regimes as "too much of a mixed bag" to attempt any systematic account of their economic policies (Chang et al., 2011, 50).

Therefore, there is no existing study which looks in detail at the relationship between farm policy and authoritarian regime stability, though a large literature has examined other determinants of regime collapse. Countries have been found to be more likely to experience an authoritarian regime breakdown and democratic transition at higher levels of development (Boix and Stokes, 2003) or as a function of economic inequality (Acemoglu and Robinson, 2006; Ansell and Samuels, 2010). Wallace (2013) finds that autocracies where a high proportion of the population live in large cities are more likely to experience instability. Geddes (1999) argues that military regimes are significantly less durable than single-party regimes. Gandhi and Przeworski (2007) find that legislatures increase regime durability, while Magaloni (2008) argues that political parties and elections are the main institutional drivers of authoritarian regime durability.⁴ Natural resource wealth has also

 $^{^{3}}$ See the canonical accounts by Lipton (1975) and Bates (1983), and Olper and Raimondi (2011) for a recent empirical study. The classic literature on the political economy of agricultural policy focuses on structural transformation: the "development pattern", by which countries shift from taxation to support of agricultural producers as their average income increases, and the "anti-comparative advantage pattern", by which protection increases when farm incomes fall relative to those in the rest of the economy (Swinnen, 2010).

⁴ This finding is supported by the large literature on 'electoral authoritarian' regimes, which finds that

been linked to autocratic survival (Smith, 2004; Ulfelder, 2007), though this is not an undisputed finding (Haber and Menaldo, 2011).

A recent article by Wallace (2013) does look at agricultural policy and regime durability, depicting farm policy as a "Faustian bargain" by which regimes implement urban-biased policies to prevent unrest in the short term, but induce long-term political liabilities by incentivizing urban migration. This analysis does capture one side of the agricultural policy dilemma in my account, but it ignores the significant set of cases in which regimes do not follow urban-biased policies, and does not seek to explain the full range of variation in agricultural policies under authoritarianism. On average, prices are reduced only four percent vis-a-vis world market prices, and the maximum price support level observed under authoritarianism increased prices by 300%. Because Wallace does not model how agricultural policy is made under autocracy, he cannot fully explain this large variation across autocracies, and it is possible that changes in agricultural market distortions are being driven by other factors (such as those outlined above) other than urban unrest. Assessing the relationship between authoritarian regime durability and agricultural policy requires estimating models of both phenomena simultaneously. In this paper, I take up this task in order to accurately show whether autocracies implement agricultural policies which *prevent* regime instability or if they *respond* to instability by manipulating agricultural market prices.

3.2 Regime Durability and Agricultural Policy: A Simultaneous Relationship

Assessing the relationship between authoritarian regime durability and agricultural policy requires an empirical strategy which can take into account the feedback loop between the two phenomena. In my account, agricultural policy is a function of competing political threats originating from food consumers and food producers, but it goes on to have an effect on these threats. Authoritarian leaders are acutely aware of threats which have their roots in economic grievances around food and agricultural policy. These could come in the

governments which allow for elections and some competition among political parties—which still remaining essentially undemocratic, for example because the executive is not selected by elections—are especially long-lasting. See, for example, Schedler (2006), Brownlee (2007) and Levitsky and Way (2010).

	Threat to	Policy Cause	Policy
	Regime		Response
Consumers	Urban Unrest	Higher Food	Lower Food
(Masses)		Prices	Prices
Producers	Elite	Lower Food	Higher Food
(Elites $)$	Transition	Prices/Producer	Prices/Producer
		Supports	Supports

Table 3.1: Food Consumers and Farmers: Political Threats, Policy Causes, Policy Responses

form of mass uprisings, such as that sparked by the removal of government food subsidies in Egypt in 1977 (Gutner, 2002), or from farmers' position within a regime's support coalition, as in the case of Pinochet's Chile where they coalesced with urban industrialists (Silva, 1993). As I laid out in my theory of authoritarian regime durability and agricultural policy in Chapter 1, political threats depend on each group's capacity to organize in opposition to the government and can be addressed in part through policies which increase their real incomes. Thus, Sadat's government acted to keep consumer prices low in order to prevent further revolts, while Pinochet implemented agricultural policies which increased the price of agricultural output and food.

Food consumers and food producers have diametrically opposed interests in agricultural policy, and pose quite different types of threats to authoritarian governments. I lay out the threats which food consumers and farmers can pose to authoritarian regimes, and the relationships which I predict them to have to agricultural policy, in Table 3.1.

Food consumers pose the threat of urban unrest when confronted with high food prices, as food price increases directly decrease their standard of living. Price spikes on international agricultural commodity markets have been found to be linked to social unrest (Bellemare, 2014), and there is some evidence that food price increases can lead to especially intense public reactions when government policy is deemed responsible.⁵ As recent events during the 'Arab Spring' illustrated, urban unrest caused by food price increases can pose a real risk to regime instability, as some of the mass uprisings which led to the collapse of regimes

 $^{^{5}}$ See Amid (2007) on the case of Iran and Gutner (2002) on Egypt.

across North Africa began as food riots or protests around costs of living (Bellin, 2012). Farmers, on the other hand, only rarely pose a risk of mass unrest to authoritarian governments. As Scott (1985) convincingly argues, farmers in developing countries are generally too impoverished and thinly spread across the countryside to be able to organize in opposition to the government. Rather than the risk of a mass uprising among farmers, authoritarian governments are more likely to be confronted with the threat of an elite coup supported by food-producing rural elites. As I will show in Chapters 4 and 5, rural elites in both Imperial Germany and Malaysia occupied powerful positions within these regimes and posed threats to regime stability significant enough to cause their governments to implement pro-rural agricultural policies which followed their interests.

In Chapter 2 I look at the relationship between socio-economic proxy measures of political threats and agricultural policy. Specifically, I take landholding inequality as a proxy for producers' political threats \mathbf{E} and use urbanization and inequality as proxy measures of consumers' political threats \mathbf{M} . In this chapter, I take a slightly different approach. Rather than using structural proxies for threats I look at the relationship between *regime instability* and policy, distinguishing between types of instability caused by producers (an elite transition) and consumers (urban unrest). The socio-economic proxies for political threats \mathbf{E} and \mathbf{M} are included only as contributing factors in more complete models of regime instability y_2 .

As I explain in Chapter 1, authoritarian leaders make agricultural policy in order to address the immediate threats of farmers and food consumers.⁶ These policies go on to have effects on regime stability. When the threat of one group increases, it is addressed through a policy which increases the relative income of that group and thus co-opts them into supporting the regime. The causal relationship between policy and regime durability is therefore reciprocal. Policy is caused by threats to regime stability, but simultaneously affects regime stability by addressing the threats which consumers and farmers pose to the regime. This simultaneous relationship is depicted in Figure 3.1.

⁶ Note that here I consider these threats in isolation, just as in Chapter 2 I look at each threat holding the other constant. An interesting case emerges when both producer and consumer threats are acute; my model predicts that in this case, policy would be chosen to lie at a moderate level between the preferred policies of producers and consumers, i.e. market distortions would not be large. Whether such a policy suffices to ensure regime stability is not clear, and perhaps must be considered in conjunction with other measures of regime maintenance such as repression.

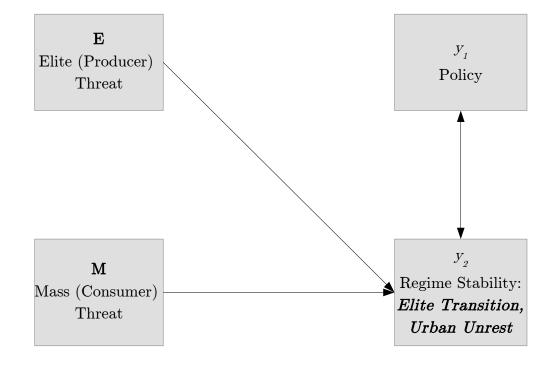


Figure 3.1: Simultaneous Relationship Between Regime Durability and Agricultural Policy

Although not explicitly depicted as such, economic co-optation and authoritarian regime durability are linked by reciprocal causation in many accounts. My analysis in this chapter can therefore be seen as a more complete examination of types of arguments already articulated in the literature. Acemoglu and Robinson (2001, 2006), for example, argue that policy concessions in the form of redistribution are used as responses to social unrest, and can have the effect of defusing this unrest under some circumstances. In the case of agricultural policy, Bates (1981) shows that African governments decreased the prices received by farmers in order to enrich urban industrial and bureaucratic elites, maximizing their chances of political survival by transferring resources to the more-threatening latter groups. Similarly, Wallace (2013, 634) argues, firstly, that "authoritarian survival is threatened by urban concentration" and, secondly, that "regimes placate city dwellers with redistributive policies tilted in their favor". Thus here a policy response has a reciprocal effect on its trigger, the threat of regime collapse.

Other studies in Political Science more broadly have explored reciprocal relationships in a similar manner to that which I follow here. Thies (2010) uses simultaneous equations to model the relationship between civil war onset and state capacity; Keshk, Pollins, and Reuveny (2004) examines the simultaneous relationship between international trade and conflict; and Malesky (2008) estimates the simultaneous relationship between foreign direct investment and local economic reforms in Vietnamese provinces.

The reciprocal relationship between agricultural policy and regime durability poses problems for any empirical analysis which takes a unidirectional approach. Results of models looking only at the effect of policy on regime stability, or of regime stability on policy, are inconsistent because the explanatory variables are not distributed independently of the error terms (Gujarati, 2004, 724-725). For this reason, I only estimate separate, or naive, models of regime instability and farm policy as preliminary tests. I estimate one set of naive models which examines the correlation between market distortions and political instability, and another set which uses measures of the structural power of food consumers and farmers which are exogenous in short-term as proxies for political threats.

My main empirical approach is to estimate two-stage simultaneous equations models of political instability and agricultural policy which deal with the problem of reverse causality between the two variables. My analysis therefore turns on two key sets of variables which each appear both as cause and response. First, and most importantly, regime stability. As laid out in Table 3.1 and Figure 3.1, I use different measures of political instability under authoritarianism to distinguish between the political threats of food consumers and farmers, and their contradictory relationships to farm price supports. I predict that:

- 1. Urban unrest will be caused by higher government food taxes (farm price supports). These policies increase the price of food for consumers, primarily urban residents, decreasing their real incomes $(y^M(p))$ as in Section 1.3, increasing the relative benefits of an alternative regime and giving them an incentive to organize in favor of lower food prices or regime change.
- 2. Elite-driven regime transitions will be prevented by higher farm price supports (food taxes). Agricultural elites' incomes $(y^E(\pi))$ as in Section 1.3 are increased by the higher produce prices caused by these market distortions, making them less likely to mount a challenge against the leadership.

The second key variable in my analysis captures agricultural market distortions. I predict that:

- 1. Lower levels of food taxes (farm price supports) will be caused by higher likelihoods of urban unrest. Policies providing low-cost food to consumers are put in place to address the threat of political instability originating among food consumers, decrease the relative utility of an alternative government and co-opt them into supporting the regime. A higher likelihood of urban unrest corresponds to a lower value of α in Section 1.3.
- 2. Higher levels of farm price supports (food taxes) will be caused by higher likelihoods of elite-driven transitions. Authoritarian leaders implement policies which deliver greater returns to agricultural elites in order to stave off intra-elite conflict. A higher likelihood of an elite transition corresponds to a greater value of α in Section 1.3.

3.3 Measures and Data Sources

3.3.1 Regime Instability

Because rural elites and urban food consumers pose quite different types of threat to authoritarian regimes, and have diametrically opposed interests in agricultural policy, I model each political threat and its relationship to agricultural policy outlined above separately. I therefore run three separate sets of models using three different variables measuring types of authoritarian regime instability: one for all authoritarian regime collapses, one for urban unrest (the hypotheses labeled 1 above) and one for elite transitions (the hypotheses labeled 2 above).

Basic data on authoritarian regime type and duration are from the Geddes, Wright, and Frantz (2012) dataset. In all the analyses included in this chapter, I restrict the universe of cases to authoritarian regimes following their coding and exclude democracies, unlike my analysis in Chapter 2 which compared autocracies and democracies. In this dataset, authoritarian regimes begin when a government achieves power through non-democratic means, achieves power democratically but restricts competition in subsequent elections, or the military restricts electoral competition or dictates policy. I use the *All Failures* variable (gwf_fail in the dataset) to examine the relationship between agricultural policy and general authoritarian regime failure. Regimes fail when a competitive election is won by somebody other than the incumbent, the government is ousted and replaced by another regime, or the group which chooses major policies changes. The *All Failures* variable captures both elite- and mass-driven regime transitions, but due to the predomination of elite-driven transitions found by other authors (Svolik, 2009), failures due to mass uprisings likely make up a small proportion of the total.

To examine the relationship between agricultural policy and consumer unrest laid out in the hypotheses labeled 1 above, I use data on urban unrest in major Asian and African cities from Urdal (2008).⁷ 55 major cities are included, 23 in Sub-Saharan Africa and 32 in Central- and East Asia, in 49 different countries for the 1960-2006 period. Unrest events include demonstrations, rioting, terrorism and armed conflict. I use both a continuous variable measuring the annual sum of unrest events in each country, *Urban Unrest (C)*,

 $^{^7}$ This is the same data used by Hendrix, Haggard, and Magaloni (2009) in their study of food prices and political unrest.

and a binary variable for unrest in any country in a given year, *Urban Unrest*, in subsequent analyses.

To examine the relationship between agricultural policy and elite transitions laid out in the hypotheses labeled 2 above, I use leader and ruling coalition data by Svolik (2012) which includes more information on how authoritarian leaders are removed from power than the Geddes, Wright, and Frantz (2012) dataset. I construct the variable *Elite Transition* to capture regime failures driven primarily by intra-elite conflict. This variable is coded '1' if a regime failure occurs due to a coup, an assassination or a civil war.

3.3.2 Agricultural Market Distortions

Measures of *Farm Price Supports* are from an ongoing World Bank research project on distortions to global agricultural markets from 1955-2010 (Anderson and Valenzuela, 2008; Anderson and Nelgen, 2012). These data estimate the direct and indirect effects of domestic government policy on price incentives faced by farmers. Because government market interventions which affect the agricultural sector are so diverse and endemic in the developing world, to caputure the true effects of government policy these data measure a broadly defined market policy distortion: the sum of border price supports and domestic price supports, with both types of support expressed as a percentage of an undistorted world market price. Common border price supports include import tariffs or export tariffs, and quantitative restrictions on international trade, while common domestic price supports are production or input subsidies. However, the list of possible market interventions is far longer, is not limited to the agricultural sector, and includes direct domestic food taxes, exchange rate policy, distortions to intermediate input prices and post-farmgate costs such as those imposed by state marketing monopolies.⁸

In my analysis, I use the annual country-level "Total NRA" variable, the percentage by which domestic agricultural *producer* prices are above (or below if negative) border prices of like products. This variable can logically vary between -1, when prices are reduced to zero, and any positive value by which percentage domestic producer prices are increased compared to border prices. It is weighted by the value of production for each product

 $^{^{8}}$ For a detailed description of the methodology used to measure these market distortions, see Anderson et al. (2008).

within each country, so is not biased by high levels of price supports for products which make up a small share of agricultural output. Unfortunately, this dataset does not cover all post-war authoritarian regimes and is biased towards market economies which play a significant role in the global agricultural trade system, and thus large food producers, exporters or importers. Small or food self-sufficient countries are excluded, which means that my analysis does not include cases such as the Soviet Union and Socialist Eastern Europe, North Korea or Cuba. Most observations are from East and West Africa (274 country-years each), and South-East Asia (133), with East Asia, South America, South Asia, Northern and Middle Africa all having between 60 and 100 observations each. All other regions are also represented in the dataset, with the exception of the Middle East, and East-Central Europe and the Soviet Union before 1990.⁹ Summary statistics for the farm price support variable, and all other variables included in the analysis, are presented in Table 3.2.

⁹ For more information on data coverage, see Appendix A.

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Min Max
24 2.42
1 0.50
1 0.19
3.06 0.24
0.98 0.17
7.03 1.08
1 0.50
1 0.36
1 0.45
1 0.22

3.3.3 Additional Explanatory and Control Variables

My empirical approach requires that I include full models of both agricultural policy and authoritarian regime instability, which will serve to construct exogenous instruments for the endogenous variables (regime stability and agricultural policy) in the two-stage models. In my models of regime instability, I follow Smith's (2004) study of the effect of oil revenue on regime failure as well as the major findings of Geddes (1999). I include the natural log of GDP Per Capita, annual GDP Growth, Oil Rents in GDP, Urban Growth, and a country's *Population in Biggest City*, which are all found to be correlated with regime durability.¹⁰ These data are all from the World Development Indicators dataset (The World Bank, 2012b). I also include each country's *Polity* 2 score (Marshall and Cole, 2011) and its quadratic term, which was found by Smith (2004) to be strongly associated with regime stability. I control for Geddes (1999) finding that *Military* regimes are more prone to failure, and *Party* regimes are less likely to fail, leaving personalist regimes as a base category as there are no observations of monarchies in the agricultural policy data. I control for the possibility that food consumers' threats do not bind a dictator because food is simply not a major concern among consumers, by including a measure of Hunger. This is a reference level of 2000 kilocalories per person per day minus an average food supply figure from Food and Agricultural Organization of the United Nations (2001). A positive value on this variable indicates that an average food consumer is not consuming a basic minimum amount of calories and will be more sensitive to food policy outcomes. Of course, I also include measures of consumer and producer structural power, M and E, respectively, which I predict will have an impact on agricultural policy through their effects on regime stability. For consumers, this is the natural log of *Population Density* from the World Bank (2012b), which measures the capacity of highly concentrated consumers to organize in opposition to the regime. My structural proxy for the political power of food producers is a Land Gini coefficient, measuring inequality in land ownership. I use data based on the FAO's agricultural censuses and calculated by Erickson and Vollrath (2004), plus additional observations from Frankema's (2010) study and those published by the FAO (1997a).¹¹

 $^{^{10}}$ Some of these controls are not reported in the following analyses, due to space constraints. However, they are included in all models.

¹¹ For more information on these data, see Appendix A.

In models of agricultural policy, I account for both the "development" and "comparative advantage" patterns noted in the literature (Swinnen, 2010) by including the natural log of Agriculture's Share in GDP, Agricultural Land in Total Land Area, Arable Land Per Capita, and the natural Log of GDP Per Capita. I also account for the positive correlation between price supports and GDP Growth, as well as Agricultural Growth found by Dennis and Iscan (2011). All these variables are from the World Development Indicators dataset (The World Bank, 2012b). I control for the tendency of policy to move in conjunction with international commodity prices by including a yearly international Food Index variable from the World Bank's commodity report Pink Sheets (The World Bank, 2012a). I include a country's Polity 2 score from Marshall and Cole (2011) to control for the positive correlation between increased democratic accountability and producer supports, which could be a major factor driving farm policy under electoral authoritarian regimes (Olper and Raimondi, 2011). All models also include a dummy variable for the authoritarian regimes of South Korea and Taiwan in East Asia, which were found to follow highly interventionist policies by Anderson and Hayami (1986).¹²

3.4 Estimation

As I laid out in Chapter 1 and Figure 3.1, my theoretical approach requires the simultaneous estimation of two equations.¹³ First, agricultural policy y_1 under authoritarianism is a function of the likelihood of regime instability y_2 and a vector of exogenous explanatory variables **x** such as those capturing development and comparative advantage,

$$E[y_1|\mathbf{X}] = \beta_1 + \beta_2 \mathbf{x} + \beta_3 y_2 + \epsilon_1.$$
(3.1)

Second, regime instability y_2 is simultaneously a function of the exogenous threats of farmers **E** and consumers **M**, a vector of exogenous explanatory variables such as the level of political contestation **x**, and responses to producer and consumer threats through agricultural policy y_1 ,

 $^{^{12}}$ This variable is not reported in my tables of results.

 $^{^{13}}$ For readability, I do not include the entire regression equations here. They are reproduced in full in Appendix B.

$$Pr[y_2|\mathbf{X}] = \beta_1 + \beta_2 \mathbf{x} + \beta_3 \mathbf{E} + \beta_4 \mathbf{M} + \beta_5 y_1 + \epsilon_2.$$
(3.2)

To test the relationship between regime stability and agricultural policy, I proceed in two steps. First, I estimate naive models of agricultural policy and regime instability which do not take into account the reciprocal relationship between the two variables. In this step, I estimate fixed-effects models of policy using population density and landholding inequality as proxy measures of the structural power of food consumers and farmers, respectively, in a very similar approach to that in Chapter 2.¹⁴ In Chapter 2, however, I do not compare the effects of these variables to Geddes' regime type indicators as I do here.

I also estimate naive models of regime instability. When using the three binary regime instability indicators All Failures. Urban Unrest and Elite Transition I estimate binary time-series cross-sectional models following Beck, Katz, and Tucker (1998), with standard errors clustered by country. This approach deals with the problem that regime instability in period t is very likely to be correlated with instability in a previous period t - t0 by creating variables which measure the number of periods which has passed since a previous instability event and including them in a logistic regression model. Rather than include a large number of dummy variables which mark the number of years which have expired since the previous unrest event, I follow the recommendation of Beck, Katz and Tucker and include three cubic splines which represent a smooth function of t-t0 for each country regime spell and a count of previous instability events as independent variables in every regression, in order to account for temporal dependence in my dependent variable.¹⁵ When using the continuous measure of Urban Unrest (C) I estimate fixed-effects panel regressions which assume that unobserved country-specific factors are correlated both with regime instability and the independent variables included in the model and thus account for this by removing panel-level means from the data.

In my second step of analysis, I estimate simultaneous equations models of the relationship between regime instability and agricultural policy which account for reverse causality between the two variables. Because they are linked by a two-way causal relationship,

¹⁴ These models use the within-panel estimator which models out country-level means from all variables.

¹⁵ The coefficients of these temporal controls are not reported below due to space constraints. In order to implement models which can be integrated within the subsequent simultaneous equations, I use the Beck, Katz, and Tucker (1998) approach rather than estimate hazard models of regime failure.

the agricultural policy variable y_1 and the regime instability variables y_2 are regarded as mutually dependent or *endogenous* in these models. The other variables $\mathbf{x}, \mathbf{E}, \mathbf{M}$ in my models of instability and policy—such as political competition, development and comparative advantage—are *exogenous*, that is, they are assumed to have an effect on policy and/or durability, but *not* to themselves be affected by changes in policy and instability y_1, y_2 .

Due to the reciprocal relationship between y_1 and y_2 , their parameters β_i cannot be estimated separately by simply disregarding the other equation in each case. Such an approach will result in inconsistent coefficient estimates because y_1 and y_2 are included as right-handside regressors but not distributed independently of the error terms $\epsilon_{1,2}$ in each equation. More specifically, estimates of β_3 , the effect of regime instability on agricultural policy in Equation 3.1, will be biased and inconsistent when not estimated simultaneously with β_5 , the effect of agricultural policy on regime instability in Equation 3.2.

The effects of regime instability on agricultural policy— β_3 in Equation 3.1—and of agricultural policy on regime instability— β_5 in Equation 3.2—are therefore estimated using two-stage regression models. These models deal with the correlation between the endogenous variables y_1, y_2 and the error terms $\epsilon_{1,2}$ in their respective equations by *first* regressing both y_1 and y_2 on *all* the exogenous variables from both Equations 3.1 and 3.2, **x**, **E** and **M**. These regression equations are used to generate \hat{y}_1, \hat{y}_2 , estimates of y_1 and y_2 conditional on the exogenous variables which are not correlated with the error terms $\epsilon_{1,2}$. These exogenous instruments \hat{y}_1, \hat{y}_2 are then included in a *second* set of regression equations which generate consistent estimates of β_3 and β_5 , that is, of the effects of regime instability on agricultural policy and of agricultural policy on regime instability, respectively.¹⁶

Because my models of regime instability take both binary and continuous indicators as dependent variables, I need to use two types of estimator to implement the two-stage regression approach. When using the binary indicators of regime instability, *All Failures*, *Urban Unrest* and *Elite Transition* I estimate two-stage probit least squares regressions using the CDSIMEQ command in Stata by Keshk (2003).¹⁷ The instability equation here

¹⁶ On the problem of reverse causality as applied to linear models, see Gujarati (2004, 673-684). A discussion of the two-stage least squares regression approach to these types of models is discussed in ibid. (770-772).

¹⁷ Although these models use probit estimation for the instability equation (Equation 3.2) and ordinary least squares for the policy equation (Equation 3.1), the general approach is identical to the least squares case outlined above. See Maddala (1983, 197-256) for more information.

includes cubic splines for each authoritarian regime spell following Beck, Katz, and Tucker (1998), as in the naive models, to control for the likelihood that instability in period t is correlated with instability in period t-t0. The policy equation includes a lagged dependent variable to account for the fact that agricultural policies in a period t are highly correlated with policies in the previous period t-1, following Keshk, Pollins, and Reuveny (2004).¹⁸ When using the continuous measure of urban unrest I estimate simultaneous equations with two-stage least squares regressions as outlined above, using Stata's REG3 command and the option 2SLS.

3.5 Results

3.5.1 Naive Models

In Table 3.3 I present the results of a naive panel model of agricultural policy (y_1) which does not take into account the simultaneous relationship between policy and regime instability. The most important result presented here is that institutional characteristics of authoritarian regimes which have been found to affect regime durability are not good predictors of variation in agricultural policy. My structural proxies for producer and and consumer threats—landholding inequality and population density, respectively—explain far more variation in agricultural policy outcomes under authoritarianism than the institutional characteristics of regimes.

In Model 1 I compare prominent variables from the literature on comparative authoritarianism to my variables which proxy for the structural power of farmers and food consumers. I include Geddes' (2003) indicators of regime type. Military regimes are significantly associated with lower rates of agricultural price supports than the base category, personalist dictatorships, and single-party regimes are significantly associated with higher rates of farm price supports. However, the effects of regime type are relatively small. A military regime, on average, reduces producer prices by around nine percentage points vis-a-vis world prices compared to a personalist dictatorship, while a single-party regime increases

¹⁸ As robustness tests, I also estimate linear two-stage least squares models for all of the two-stage probit least squares models (results not reported). These confirm the results on the relationship between instability and policy presented below.

producer prices by around eleven percentage points. These are small differences in comparison to the range of observed policy outcomes under authoritarianism, which runs from policies decreasing producer prices by around 75% to those increasing them by around 300% (see Table 3.2).

A structural proxy for farmers' political threats, landholding inequality, performs much better than institutional regime characteristics, with a Gini coefficient shift of two standard deviations, from 0.4 to 0.7, resulting in a predicted increase in producer price levels of over 45 percentage points compared to undistorted world prices. A structural proxy for consumers' political threats, the natural log of a country's population density, has even larger effects on agricultural policy. Increasing this measure from one standard deviation below its mean to one standard deviation above its mean results in a predicted decrease in producer price support of around 55 percentage points, from 0.39 to -0.16. This naive model suggests that political threats matter to agricultural policy-making under authoritarianism, and that they matter far more than features of authoritarian regimes which have been emphasized in previous studies of regime durability.

In Table 3.4, I present naive models of regime instability (y_2) which do not account for its simultaneous relationship with agricultural policy. Model 1 takes the binary *All Failures* as the dependent variable, Model 3 takes the continuous *Urban Unrest* (*C*) variable, Model 5 takes the binary *Urban Unrest* variable and Model 7 takes the binary *Elite Transition*. Models 1, 5 and 7 thus include the control variables described above to account for temporal dependence in regime instability, while Model 3 is a fixed-effects panel regression.

As illustrated by the graphs in Figure 3.2, these models provide first evidence that farm price supports have the contradictory effects on different types of political instability laid out in Table 3.1. Increased farm price supports are significantly correlated with a lower likelihood of a regime failure in Model 1 and weakly correlated with a lower likelihood of an elite transition in Model 7. This is first evidence of a political mechanism by which authoritarian leaders can co-opt the political threat of an agricultural elite by increasing their incomes through market-distorting policies. Conversely, higher farm price supports are weakly associated with a greater rates of urban unrest in Model 3. This result suggests that as authoritarian governments increase farm price supports, they run the risk of mass-based political instability as consumers react negatively to bearing the cost of policy.

DV: Farm	(1) Naive	(2) 1st Stage	(3) 1st Stage	(4) 1st Stage	(5) 1st Stage
Price Support		– All Failures	– Urb. Unrest	– Urb. Unrest	– Elite Trans.
(y_1)			(C)		
Militana Dam	-0.09**	-0.02	0.02	0.03	-0.005
Military Reg.	(0.04)	(0.02)	(0.03)	(0.03)	(0.02)
Party Reg.	0.11**	-0.001	0.01	0.02	0.007
I alty neg.	(0.05)	(0.02)	(0.02)	(0.02)	(0.02)
Land Gini	1.56***	-0.05	0.06	0.02	-0.05
Land Gim	(0.42)	(0.05)	(0.06)	(0.07)	(0.05)
Ln Pop.	-0.22**	0.02**	0.03***	0.03***	0.015^{*}
Dens.	(0.11)	(0.01)	(0.01)	(0.01)	(0.009)
Ln Ag/GDP	-0.004	-0.03	0.11	0.03	-0.01
LII Ag/GDI	(0.10)	(0.02)	(0.13)	(0.03)	(0.02)
Ln GDP	0.34***	0.02	0.05***	0.06***	0.03**
	(0.09)	(0.01)	(0.02)	(0.02)	(0.01)
GDP Growth	0.17	0.23*	0.08	0.06	0.15
GDI GIOWIII	(0.17)	(0.13)	(0.13)	(0.14)	(0.13)
Food Index	-0.002***	-0.0006***	-0.0007***	-0.0005***	-0.0005***
FOOD IIIdex	(0.001)	(0.0001)	0.0001	(0.0001)	(0.0001)
Ag Growth	-0.001	-0.0006	-0.001	-0.0004	-0.0006
Ag GIOWIII	(0.001)	(0.001)	(0.001)	(0.001)	(0.0009)
Ag Land/Cap	-0.01	-0.0005	-0.0002	0.0001	-0.0004
Ag Land/Cap	(0.01)	(0.0003)	(0.001)	(0.0004)	(0.0004)
Arable	-0.41**	0.04	0.14***	0.14**	0.03
Land/Cap	(0.19)	(0.05)	(0.05)	(0.06)	(0.04)
Lag Price		0.74^{***}	0.77***	0.75***	0.75^{***}
Supp.		(0.03)	(0.02)	(0.03)	(0.03)
Constant	-1.65***	-0.20*	-0.45***	0.51***	-0.23**
	(0.50)	(0.10)	(0.12)	(0.15)	(0.10)
Obs.	761	643	757	515	643
F stat.	4.15	70.45	291.24	63.83	69.00

Table 3.3: Naive and First-Stage Linear Models of Determinants of Agricultural Policy

through increased food prices. The naive model taking a binary indicator of urban unrest shows only a very small and statistically insignificant correlation between price supports and consumer unrest, a result which is not necessarily surprising given the information on the magnitude of unrest which is discarded by using only a binary dependent variable. In sum, the results of these models give preliminary evidence that the trade-off between farmers' and consumers' interests is reflected in the data, but demand to be more rigorously tested in the two-step simultaneous approach.

	(1) Naive	(2) 1st Stage	(3) Naive	(4) 1st Stage	(5) Naive	(6) 1st Stage	(7) Naive	(8) 1st Stage
	All Fail.	All Fail.	Urb. Unr. (C)	Urb. Unr. (C)	Urb. Unr.	Urb. Unr.	Elite Trans.	Elite Trans.
Farm Price	-2.19**		1.05		-0.04		-3.11	
Support (y_1)	(1.08)		(0.67)		(0.52)		(1.96)	
Militant Doc	1.05^{**}	0.48	-0.61	0.96^{**}	0.57^{**}	0.53^{*}	2.04^{**}	1.13^{*}
INTITION AND AND	(0.45)	(0.45)	(0.65)	(0.43)	(0.24)	(0.30)	(0.95)	(0.68)
Doutto Doc	-3.80***	-1.49***	-0.25	-0.81***	-0.47	-0.32	-0.44	0.28
rany neg.	(0.69)	(0.51)	(0.42)	(0.30)	(0.33)	(0.22)	(1.24)	(0.57)
Dolit	0.51^{**}	0.23^{***}	-0.03	-0.01	-0.02	-0.01	-0.29*	-0.15
T OTHY	(0.13)	(0.03)	(0.01)	(0.02)	(0.03)	(0.02)	(0.17)	(0.12)
Dolitar So	0.04^{**}	0.02^{***}	-0.03***	-0.01**	-0.001	-0.0003	-0.05*	-0.02
	(0.02)	(0.01)	(0.00)	(0.004)	(0.01)	(0.004)	(0.03)	(0.02)
I and Cini	3.90	1.35	-0.89	3.78^{***}	2.14^{*}	1.43^{**}	2.17	0.54
	(2.60)	(1.35)	(2.87)	(1.15)	(1.21)	(0.72)	(2.51)	(2.16)
Ln Pop.	1.35^{***}	0.75^{***}	-0.28	0.77^{***}	0.17	0.02	0.82	0.78^{**}
Density	(0.46)	(0.24)	(06.0)	(0.17)	(0.17)	(0.11)	(0.62)	(0.32)
Urban	16.45	13.50	22.22^{*}	16.23^{**}	4.07	0.12	7.19	-1.82
Growth	(16.31)	10.41	(12.68)	(8.03)	(6.57)	(5.32)	(16.80)	(17.33)
Pop. Biggest	1.11	0.80	-5.28	-7.50^{***}	-2.12**	-1.70^{**}	6.41^{*}	1.71
City	(1.72)	(1.39)	(4.40)	(0.85)	(0.87)	(0.71)	(3.70)	(1.76)
Hunger	0.001	0.0001	0.0006	-0.0006	0.0002	0.0003	0.0004	0.0004
1921mtr	(0.001)	(0.0008)	(0.0005)	(0.0006)	(0.0005)	(0.0004)	(0.001)	(0.000)
Constant	-10.85**	-6.68***	4.17	-1.84	0.75	-0.47	-20.81***	-10.93^{***}
ALLEAGUE	(4.22)	(2.47)	(6.88)	(2.35)	(2.14)	(1.70)	(7.52)	(3.80)
Obs.	693	643	816	757	562	515	693	643
Wald Chi2	74.17	130.88			1196.48	150.04	1376.23	38.53
F stat.			3.02	12.98				

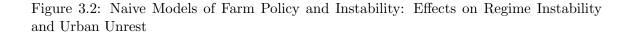
Table 3.4: Naive and First-Stage Probit/Linear Models of Determinants of Regime Instability

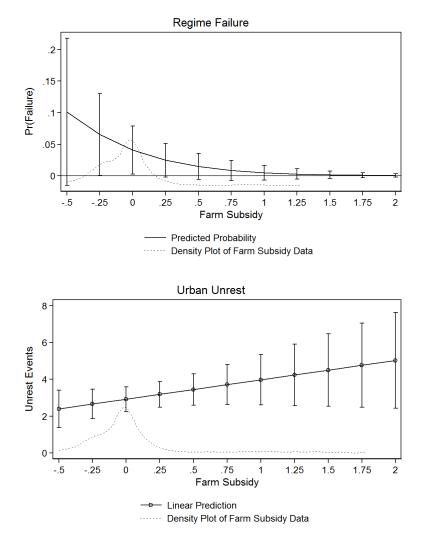
3.5.2 Simultaneous Models

In Table 3.5, I present the results of the second-stage regressions described in Section 3.4 which include the exogenous instrument of regime instability \hat{y}_2 as a predictor of agricultural policy \hat{y}_1 . Surprisingly, the results of these models suggest that general regime instability and elite-driven transitions are more important in determining farm policy than the threat of urban unrest. The results of Models 1 and 4 show that an increased likelihood of regime failure or an elite transition causes a significant increase in farm price supports, although the effects are relatively small: an increase in the regime collapse instrument in Model 1 from its minimum to its maximum results in a price increase of approximately 10% vis-a-vis world markets.

On the other hand, evidence that the risk of urban unrest causes decreases in farm price supports is weak. Models 2 and 3 show very small, insignificant and contradictory effects of the unrest instrument on policy, with Model 2 predicting a negative response to urban unrest and Model 3 a positive response. Variation in farm policy can instead be attributed to the size of the agricultural sector and a country's average level of wealth, both of which are positively correlated with price supports, and also to international food price increases, which are negatively correlated with supports as governments seek to smooth price levels over time. The large negative coefficient on the constant term reported in the results of Models 2 and 3 confirms the established finding that autocracies tax agriculture, on average, but the insignificance of the coefficients on the unrest instruments indicate that this pattern is not a result of the threat of uprisings originating among urban food consumers. These findings suggest that, contrary to the accepted wisdom on the determinants of agricultural policy under authoritarianism, the threat of urban unrest does not cause significant decreases in government price supports for farmers, while intra-elite conflict causes policy responses which significantly increase the price of agricultural output.

Table 3.6 presents the results of second-stage regressions which include the exogenous instrument of agricultural policy \hat{y}_1 as a predictor of regime instability \hat{y}_2 . After accounting for the simultanous relationship between instability and policy, these results provide markedly stronger evidence than the models presented in Table 3.4 that agricultural policy has significant effects on regime stability, and that these effects vary across types of instability. The exogenous instruments for agricultural policy from the first-stage models





Predicted probabilities and confidence intervals in upper panel generated using the package SPost in Stata (Long and Freese, 2006). Marginal effects graph and confidence intervals in lower panel generated using the Margins package in Stata.

DV: Farm Price	(1) 2nd Stage	(2) 2nd Stage –	(3) 2nd Stage –	(4) 2nd Stage
Support (\hat{y}_1)		Continuous	Binary unrest	
		unrest indicator	indicator	
All Epiluros (\hat{u}_{i})	0.013**			
All Failures (\hat{y}_2)	(0.006)			
Urb. Unrest		0.002	-0.004	
(\hat{y}_2)		(0.004)	(0.009)	
Elite Trans.				0.01*
(\hat{y}_2)				(0.006)
Ln Ag/GDP	0.01	0.05***	0.04*	0.005
LII Ag/GDI	(0.02)	(0.02)	(0.02)	(0.02)
Ln GDP	0.02	0.04***	0.04***	0.01
LII GDI	(0.01)	(0.01)	(0.01)	(0.01)
Food Index	-0.0005***	-0.0007***	-0.0005***	-0.0004***
roou muex	(0.0001)	(0.0001)	(0.0001)	(0.0001)
Ag GDP	0.0001	-0.001	-0.0004	-0.0005
Growth	(0.001)	(0.0006)	(0.0008)	(0.001)
Ag Land /Total	-0.0003	-0.0002	-0.0001	-0.0003
Ag Land/Total	(0.0003)	(0.0003)	(0.0003)	(0.0003)
Arable	-0.00002	0.06*	0.04	-0.0003
Land/Capita	(0.03)	(0.03)	(0.03)	(0.03)
Lag Price	0.80***	0.81***	0.81***	0.81***
Support	(0.03)	(0.02)	(0.03)	(0.02)
Constant	0.003	-0.13**	-0.13*	0.02
Constant	(0.06)	(0.06)	(0.07)	(0.06)
Observations	643	423	515	643
F stat.	156.84	16.24	141.52	156.80

Table 3.5: Simultaneous Equation Model, Equation 2 – Models of Agricultural Policy with Instruments and Corrected Standard Errors

reported in Table 3.3 are associated with lower probabilities of regime failures and elite transitions, as in Table 3.4, but in these models the marginal effects of changes in policy are highly statistically significant.

Most importantly, the substantive effects of increasing agricultural price supports are large, even compared to previous institutional typologies established as important in determining regime durability. In Model 1, taking *All Failures* as the dependent variable, moving from a value of -0.5 to 0 on the agricultural policy variable \hat{y}_1 reduces the likelihood of regime collapse from 0.13 to 0.02.¹⁹ This is a shift far larger than the differences in the likelihood of regime collapse associated with single-party or military regimes compared to personalist dictatorships, which are only -0.02 and 0.04, respectively. In Model 4, taking Svolik's data on elite transitions as the dependent variable, the same change in the policy instrument \hat{y}_1 reduces the likelihood of an elite transition from 0.15 to 0.01, on average. In this model, the differences in the likelihood of a transition associated with single-party and military regimes compared to personalist dictatorships are small—-0.006 and 0.04, respectively and statistically insignificant.

The results of the second stage of the simultaneous equations models also confirm the established link between consumer unrest and farm price supports, and show that farm policy is more important for unrest than established typologies of authoritarian regimes. Higher producer supports have the opposite effect on urban unrest compared to their effect on elite-driven transitions, and have significant positive marginal effects on the predicted number of urban unrest events in a country. At a level of -0.75 on the linear policy instrument \hat{y}_1 from the first-stage model, Model 2 predicts an average of 2.7 urban unrest events per year, while a regime which follows a neutral policy and sets prices at world market levels faces a predicted average of 3.34 unrest events. Regimes which set the policy instrument at 2, doubling prices compared to world markets, face a predicted 4.28 unrest events per year. The magnitude of the effects of agricultural policy is greater than the effects of established typologies of authoritarian regimes. Single-party regimes experience only 1.04 fewer unrest events than personalist regimes, on average, while military regimes

¹⁹ Note that changes in the policy instrument \hat{y}_1 should not be equated with changes in the original policy variable y_1 , due to how the data are reshaped in the estimation process. Therefore, a shift from -0.5 to 0 on \hat{y}_1 is not necessarily the same as a shift from a policy which decreases market prices by 50% to free market prices, as it would be in the original dataset.

	(1) 2nd Stage	(2) 2nd Stage	(3) 2nd Stage	(4) 2nd Stage
	All Failures	Urb. Unrest (C)	Urb. Unrest	Elite Trans.
Farm Price	-1.91**	1.20**	0.49	-2.96**
Supp. (\hat{y}_1)				
	(0.92)	(0.53)	(0.43)	(1.23)
Military	0.45	0.88**	0.44	0.71
Reg.				
	(0.37)	(0.42)	(0.27)	(0.53)
Party Reg.	-1.60***	-1.05***	-0.27	-0.32
	(0.47)	(0.26)	(0.17)	(0.49)
Polity	0.22***	-0.01	-0.01*	-0.12
	(0.03)	(0.02)	(0.02)	(0.12)
Polity Sq	0.02***	-0.01***	-0.00004	0.002
	(0.01)	(0.004)	0.004	(0.002)
Land Gini	1.30	3.47***	1.38**	-0.48
	(1.23)	(1.06)	(0.69)	(1.93)
Ln Pop.	0.59***	0.66***	0.07	0.43**
Density				
	(0.18)	(0.12)	(0.08)	(0.20)
Urban	9.92	19.22**	-2.18	7.02
Growth				
	(9.51)	(7.97)	(5.10)	(16.09)
Pop. Biggest	0.96	-7.29***	-2.06***	3.27**
City				
	(1.15)	(0.85)	(0.60)	(1.64)
Hunger	0.0004	0.0002	0.0001	-0.00003
	(0.0006)	(0.0005)	(0.0003)	(0.0007)
Constant	-6.41***	0.85	0.37	-7.62**
	(2.30)	(1.98)	(1.28)	(3.22)
Obs.	643	757	515	643
LR Chi2,	126.71		140.79	29.27
2nd Stage				
F stat., 2nd		16.24		
Stage				

Table 3.6: Simultaneous Equation Model, Equation 1 – Models of Regime Instability with Instruments and Corrected Standard Errors

experience 0.88 more unrest events than personalist regimes on average. As in Table 3.6, results of Model 3 using a binary indicator of unrest events do not show a strong or significant relationship between price supports and unrest, although in this model the coefficient has the same positive sign as that in Model 2.

Accounting for bias which arises due to the reciprocal relationship between agricultural policy and political instability, these simultaneous equations models provide strong evidence that previous understandings of the role of agricultural policy under authoritarianism are one-sided and incomplete. Agricultural policy is not a simple mechanism which privileges urban food consumers. It involves a trade-off between producer and consumer interests, because although urban unrest can be prevented by decreasing farm price supports, the imposition of such policies results in a significantly increased likelihood of elite-driven regime failures.

3.6 Conclusion

The analysis presented in this chapter is an important contribution to the growing literature on authoritarian regime stability and bolsters my findings in Chapter 2 on the determinants of agricultural policy under authoritarianism. Using an approach which accounts for reverse causality between policy and regime stability, I present the novel finding that agricultural policy has significant effects on regime stability over and above the effects of economic and institutional factors highlighted in the existing literature on comparative authoritarianism. This chapter also suggests that the process determining farm policy under authoritarianism is more complex than previously depicted in the literature. My results show not only that policy is a trade-off between the interests of urban consumers and rural elites, but that intra-elite politics is *more* important for farm policy under authoritarianism than mass politics. Explicitly modeling the effect of urban unrest on policy reveals the remarkable result that the tendency for authoritarian governments to tax agriculture is not associated with the likelihood of political discontent among urban food consumers. Instead, my results suggest that other features of authoritarian regimes are driving this correlation, challenging canonical arguments from Bates (1983) to Wallace (2013) which assert that the threat of urban unrest is the main factor driving agricultural policy under authoritarian regimes. On the other hand, the likelihood of an elite-driven transition is significantly correlated with

policy outcomes, suggesting that intra-elite politics is more important for policy than urban unrest, on average, and that by neglecting cases where policy does not discriminate against farmers scholars have been missing key aspects of the relationship between agricultural policy and authoritarian politics. In Chapters 4 and 5, I will look in depth at two ruralbiased dictatorships, Imperial Germany and Malaysia, and show how intra-elite politics led to pro-agriculture policies which went on to contribute to regime stability.

More work needs to be done to better model the relationship between regime stability and agricultural policy. An urban unrest dataset with more complete coverage of countries outside of Africa and Asia would increase the number of observations included in the analysis and perhaps reveal a significant relationship between urban unrest and policy. Similarly, because the World Bank agricultural distortions database does not cover the Middle East and North Africa (except Egypt), the results presented in this chapter may be biased when one considers this area's dependence on food imports and the saliency of food policy for political stability in the region. Finally, my analysis is over-simplified because it essentially holds international food prices constant. Agricultural policy probably does not only affect politics by itself, but in conjunction with fluctuations in international markets, with consumers responding particularly vocally when food subsidies cannot fully compensate for price increases, for example. The results presented above should be regarded as a preliminary 'first cut' for these reasons.

However, my findings do provide support for the theoretical arguments laid out in Chapter 1. Political threats are translated into policy, as the likelihood of an elite transition (y_2) , which corresponds to regimes' weighting of elite interests (α) in the Stigler-Peltzman framework, is correlated with policy outcomes (y_1) . And policy goes on to have an effect on regime stability, with increases in farm price supports (y_1) significantly decreasing the likelihood of an elite transition (y_2) . This suggests that patterns of political threats and agricultural policy responses do emerge under authoritarianism, and that these patterns have significant effects on regime durability. Further vindication of my economic approach to authoritarianism, this is also a more complete account of the origins of authoritarian regime stability than presented by other authors. Rather than categorizing authoritarian regimes by observable institutional characteristics and looking at their effects on instability, I model both the *causes* of regime instability and authoritarian governments' *responses* to these threats through agricultural policy. In the following two chapters, I present detailed case studies which illustrate exactly how rural-biased agricultural policies responded to, and mitigated, elite-level political threats in Imperial Germany and Malaysia.

Chapter 4

Historical Evidence: Agricultural Policy and Authoritarian Regime Durability in Imperial Germany

4.1 Introduction

In Chapter 1, I applied the Stigler-Peltzman framework to construct a theory of agricultural policy under authoritarianism. I described how authoritarian leaders make policy according to a grim calculation of the political threats posed by farmers and food consumers to their regime, maximizing their support by addressing these threats through regulation which alters the economic position of each group. Thus policies ensuring higher farm produce prices are supplied by regimes under relatively acute threats originating from agricultural elites who were endowed with large average landholdings or who occupied pivotal positions within institutions. On the other hand, policies ensuring lower food prices are supplied by regimes under acute threats originating from food consumers who were densely concentrated in urban areas or over-represented in important institutions such as legislatures. By supplying optimal price levels through agricultural policies, regimes address political threats and maximize their tenure in power.

In Chapters 2 and 3, I went on to test this theory using cross-national data on agricultural price distortions and political instability under authoritarian governments. I showed that

agricultural policy does involve a trade-off between producer and consumer interests: Increasing price supports for farm produce decreases the likelihood of an elite-driven regime collapse, but simultaneously increases the likelihood of urban unrest. My empirical analysis also showed that agricultural policy is significantly affected by the likelihood of an elite-driven regime collapse, but not by the likelihood of urban unrest. This is a novel and puzzling finding, given previous scholars' understanding of food policy as a tool by which dictators lower food prices and increase standards of living for urban residents. As such, it demands further exploration to show exactly how agricultural policy is a function of intra-elite politics, and how increasing farm produce prices leads to a decrease in intraelite instability under authoritarian regimes when producer threats are acute and policy is made at a point high on the price-profit curve as at point S_3 in Figure 1.3.

To this end, the following chapter is a detailed case study examining the political causes and consequences of the protectionist shift in agricultural policy which took place in the late 1870s in Imperial Germany. As I will show using detailed quantitative and qualitative evidence, the German case provides significant insight into the ways in which an authoritarian regime can—under some circumstances—maximize its tenure in power by increasing price supports for farmers. However, the story is not simple. Policy and regime outcomes were the result of a complex interplay between world grain price movements, political institutions, socio-economic features of the polity at large, and the actions of landed elites and Chancellor Bismarck. Luckily, the standard of primary quantitative data sources and historical literature on this period of German history allows me to construct a study which deals with all aspects of the case in great depth; greater depth than is possible for contemporary authoritarian regimes where data collection can be far more challenging.

To briefly outline the argument, the impetus for agricultural protection in 1870s Germany was given by declining world grain prices, which shifted the policy preferences of landowning *Junker* elites away from free trade by around 1877. Appealing explicitly to the theoretical framework in Section 1.3, in Imperial Germany the power of rural elites α was always high, but due to international market fluctuations the policies followed by the government had to change from free trade to protectionism in order to ensure the profits of agricultural producers, y_E .¹ The powerful, unelected Imperial executive was dominated by

 $^{^{1}}$ In fact, the central role played by international market forces in this case study presents an important driver of policy which I essentially bracket in Chapters 2 and 3 by controlling for international food prices

these landed elites due to their historical links to the Prussian monarchy. Their position in the legislature was considerable because of the strong correlation between landholding inequality and election victories by conservative landowning candidates. Through their presence in, and influence on, the executive, the Junkers forced the introduction of a protectionist bill in the Reichstag. A coalition of conservative landowners and the catholic *Zentrum* party passed the bill into law. Subsequent gains from the protectionist trade bill fell disproportionately on areas dominated by the Prussian aristocracy and characterized by higher levels of landholding inequality. Thus the political support of the aristocracy was secured by the Chancellor for the duration of his tenure.

4.2 Authoritarianism and Agricultural Protection in Imperial Germany

The German case presented in this chapter is from the heart of Europe, a region which today is a bastion of democracy and where the few remaining authoritarian regimes— Belarus, most notably, but perhaps also Ukraine and until recently Albania (Marshall and Cole, 2011)—appear as anachronisms next to the member states of the European Union. This was not always the case, of course. European governments, from the late nineteenth through the late twentieth centuries, were by no means shining examples of democratic government, and included in their ranks some of the most deplorable authoritarian regimes in history. Germany, traditionally the largest state on the continent by population, has a experienced a veritable litany of political transitions since unification in 1871. Democratization, authoritarian regime formation and collapse—including that of the notorious Fascist dictatorship which Gerschenkron (1943, 3) viewed in the 1940s as "an irrevocable challenge" to democracy—not to mention wars and a fifty-year division after 1945 have all played out on the stage of its political history.

For generations of political scientists, this history has been fruitful ground for research. Among the most compelling questions thrown up by the German experience is the puzzle of

in my cross-national regressions. However, the question of how international market fluctuations *interact* with domestic political structures and policy environments to create political outcomes is one deserving of a more complete treatment. See Gourevitch (1978) for a qualitative, comparative treatment of the same historical case examined here.

why the country did not democratize before World War One, despite swift economic growth and urbanization. Germany provides the original problematic exception to modernization theory.

Embodied most famously in the repeal of the Corn Laws in Britain in 1846, there was a secular shift towards free trade in Europe, including agricultural trade, from the beginning of the nineteenth century until the 1870s (Kindleberger, 1975). However, starting in 1879 with the infamous 'iron and rye' tariffs, agricultural policy in the German Empire shifted from free trade to protectionism, with restrictions on grain and livestock imports being steadily increased, and the domestic prices of staples such as wheat and rye rising significantly above world market prices. In what follows, I present evidence that this shift in policy from laissez-faire liberalism to state interventionism in the agricultural sector was a key part of a broader authoritarian survival strategy under Kaiser Wilhelm I and his Chancellor Bismarck, the result of political-economic calculation rather than a simple reflection of economic interests. As world grain prices declined from 1873, the Imperial German regime shifted its agricultural policy from free trade to protection in line with the preferences of the most powerful and threatening political interest group in the Empire: grain-growing Prussian aristocrats.² Protectionist tariffs were enacted in order to increase the incomes of these agricultural producers, and thus cement their economic and political position. Urban food consumers who, due to their economic position and powerlessness within the Imperial German political system, did not pose a credible threat to the regime, were the losers of these economic policies.

The argument that protectionism in agriculture was a tool by which the Imperial German regime sought to remain in power is not new. Beginning in the 1870s, a steep decline in the price of imported grain buffeted East Elbian agricultural elites economically and threatened to erase them from the political landscape through a wave of bankruptcies and estate sales. German liberals such as Brentano (1911) recognized at the beginning of the twentieth century that the protectionist response of the government to the existential crisis of the landed *Junkers* was not only an important shift in policy, but part of a strategy by which Bismarck sought to secure the position of the monarchy by buying off its core aristocratic support base at the expense of urban food consumers. For later historians such

 $^{^{2}}$ Though later these policies were extended to meat-producing farmers also (Hunt, 1974).

as Gerschenkron (1943), the imposition of grain tariffs in 1879 "meant the perpetuation of the feudal element in German society through preservation of the traditional economic basis of the Junkers". Similarly, Rosenberg (1967, 178-188) noted that through agricultural protectionism, Bismark was able to "freeze" the rural class structure and distribution of land ownership in the face of an economic crisis, safeguarding the political support of agricultural elites for the existing regime while at the same time extending the power of the state in economic affairs and securing the Empire.

Political scientists have approached the German move to protectionism in agriculture from a different angle, regarding it more as an empirical testing ground for theories on the political consequences of international economic integration than as a case study of an authoritarian survival strategy.³ Rogowski (1989, 38-43) famously explains the 'iron and rye' coalition in Germany as one between land and capital, or scarce economic factors of production as predicted by the Stolper-Samuelson theorem (Stolper and Samuelson, 1941). Brawley (1997) notes that Rogowski's approach cannot explain the persistence of protectionism in Germany despite considerable capital accumulation during the last part of the nineteenth century, and argues that the coalitions formed around trade policy are better explained by a model allowing for factors of production to have varying degrees of mobility. Schonhardt-Bailey (1998) emphasizes the role of political ideology, and political parties, as intervening variables which affected the impact of economic interests on German trade policy after 1878.

As informative as these political-economic analyses are, insofar as they seek to explain policy outcomes such studies of political coalitions in Germany before 1914 implicitly assume that the country was a parliamentary democracy, and that political parties in the Reichstag made the critical decisions over tariffs. However, as I will explain in more detail below, the Imperial German political system was a complex structure over which the Kaiser and his Chancellor exercised decisive authoritarian influence. Therefore, although patterns of party support or legislative voting can illustrate the links between economic dynamics and

³ Berman (2001, 442) is a notable exception; using the Imperial German case to illustrate the strengths and weaknesses of modernization theory, she briefly notes Bismarck's tariff policies as a mechanism by which he attempted to "lock in" the support of landed interests and large industrialists for the monarchy. Gourevitch (1977) also makes note of 'political explanations' of protectionism after 1873, but does not give due credit to the authoritarian nature of the German political system at the time. Economic historians also approach the 'iron and rye' coalition without an eye to authoritarian politics; see, for example Klug (2001).

some of their political effects, they were only a small part of a larger mechanism by which policy was made in the Empire (see Figure 4.1). This point is particularly pertinent with regards to Brawley and Schonhardt-Bailey's critiques of Rogowski's scarce factors model: the persistence of agricultural protectionism in Germany is not surprising at all when one considers the role which it played in the survival strategy of the authoritarian monarchy, as historians do and I will below.

Rather than a testing ground for political-economic theory, I take the Imperial German case as a source of valuable material illustrating authoritarian politics, economic policy under authoritarianism, and the politics of a pro-producer authoritarian agricultural policy. This case study focuses on the founding Imperial regime, that of Kaiser Wilhelm I and his Chancellor Otto von Bismarck, from the time directly before the imposition of the first protective tariffs (1878) until the death of the Kaiser (1888) and subsequent dismissal of Bismarck (1890). I choose to limit my analysis to this time period in order to restrict the unit of analysis to one 'regime' under a concrete set of actors. The extension of the case study to include Kaiser Wilhelm II and his governments would create several extra layers of complexity while not providing much in the way of extra insight into the role of agricultural policy in authoritarian regime survival.

4.3 Setting the Stage: Political Threats to the Imperial German Regime

The Imperial German regime was not inherently secure, but instead faced political threats to its future viability from both urban food consumers and rural agricultural producers. My theory of economic policy under authoritarianism and other theories discussed in Chapter 1 begin with the assumption that the core goal of any authoritarian leader is the retention of power. When examining the politics of nineteenth-century Europe it is worth questioning the applicability of this assumption to regimes which had endured, in the Prussian case for example, for hundreds of years (Clark, 2006). Did the German Kaiser and Bismarck really fear the downfall of their regime and the related loss of power, and make policy to secure their government against this possibility? The answer to this question is an unambiguous yes. After the French revolution, the Napoleonic wars and the uprisings of 1848, the specter of democracy and popular revolution loomed large in the minds of the leaders of all the old European empires, and the political consequences of such movements were all too clear to them.

Biographers of Wilhelm I and Bismarck agree that their primary goal in government was the the preservation of the Prussian monarchy in the face of domestic challenges 'from below'—that is, varyingly, from liberal professional elites, the Catholic church, or Social Democrats and the working class. Bismarck's position and success as Chancellor were derived from his dedication to, and political skill in achieving, this end (Börner, 1984; Steinberg, 2011). In the context of this study, the revolutionary threat of the masses, or Svolik's problem of 'authoritarian control' corresponds to the political threat of food *consumers*. In determining agricultural policy, the threat posed to the regime by this group proved less pressing than that backing the political demands of agricultural producers, leading the government to follow a pro-producer policy which raised food prices.

A pro-producer policy was favored by the regime because for the Chancellor, if not for the Kaiser, there existed the second aspect of the 'dictator's dilemma' as laid out by Svolik (2009, 2012). For Bismarck there was the more acute risk of being replaced in his position by rival elites, or a problem of 'authoritarian power-sharing'. This threat originated with food *producers*, and was sufficient to compel the Chancellor to follow an agricultural policy which privileged this group over urban food consumers.

Agricultural producers from Northeast Germany, who were more reactionary than Bismarck and saw political compromise with liberals as a betrayal of their interests, had been the Prussian economic and social ruling class for hundreds of years. Their large estates dominated vast swathes of the East Elbian countryside, giving them dominant positions in local life as landlords and employers which even in the 19th century were akin to those of feudal lords (Schissler, 1980). These aristocratic Junkers (an abbreviation of *Junge Herren* or 'young lords') had a large degree of formal and informal influence over the Kaiser, who was of a more reactionary, conservative disposition than his Chancellor and actively sympathised with the Junkers. They dominated the Prussian and later Imperial army. They also had a large influence on military policy and administration in the Kaiser's Military Cabinet, an autocratic inheritance which was not under the supervision of a civilian Minister, let alone a democratically elected parliament.⁴ The importance of the Junker's position in the military is not to be underestimated in the case of Germany, a country which was united only through three inter-state wars, and whose Kaiser—as second in line to the throne—was essentially trained as a soldier rather than as a statesman (Börner, 1984). Not without reason did Bismarck often appear in military uniform in public, although he served only one year full-time in the army; he feared the influence of the Prussian officer corps.

The risk of Bismarck being replaced by an ultra-conservative rival was real, especially after his break with the Junkers' parliamentary wing, the *Altkonservative Partei*, in 1866. In 1872, for example, in response to Bismarck's progressive policies which posed a threat to the social position of the large landowners in East Prussia, both the Prussian General von Moltke and Ambassador in Paris, Count Arnim, were considered as replacements for Bismarck by conservative elements in Prussia.⁵ As a concession to the Junker elites, the Kaiser forced the Chancellor to give up his position as Prussian Minister President for a year, but to his long-time political ally Arnim von Roon rather than an arch-conservative rival.

4.3.1 The Institutional Setting: Executive, Bureaucracy and Legislature Favor Producer Interests

Bismarck faced a threat to his position from landed Junkers, and ended up implementing an agricultural policy which followed their preferences in 1879. However, the institutional framework in Germany did not facilitate the seamless translation of Junker preferences into policy. Imperial Germany was no absolutist monarchy, although it was also far from being a parliamentary democracy. It was a constitutional regime which would today be described

⁴ The Prussian military cabinet had been subject to some degree of control by a civilian Minister of War after 1848. It was Wilhelm I himself who had abolished the Minister's role in military administration and defense policy in 1858. A note made by the Kaiser in the margin of a letter from his Head of the Military Cabinet, Manteuffel, clearly shows the absolute and direct power which he demanded over the Prussian army. At the suggestion that the army be dependent on a constitutional Minister who was responsible to parliament he writes: "Who in all Prussia could think of such a thing?" (reproduced in Schmidt-Bückeburg (1933, 64)).

 $^{^{5}}$ The reforms, which eventually were successful, placed all public schools under state control through the imposition of state school inspectors. They also instituted a local government and administration reform, under which considerable power was transferred from an essentially feudal structure to a modern, if not democratic, system of local government. See (Börner, 1984, 226-228)

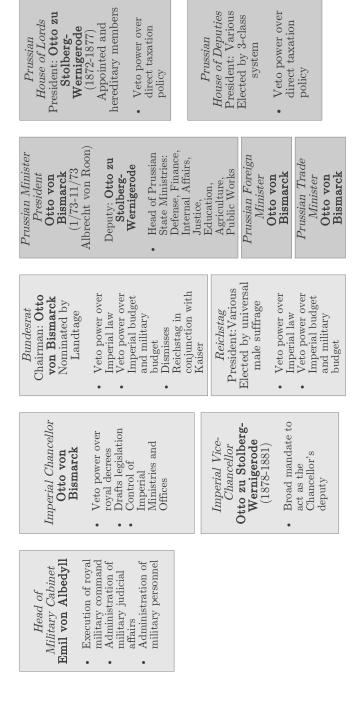
as 'competitive' or 'electoral' authoritarianism, where nominally democratic institutions play an important—though not decisive—role in maintaining and exercising political authority (Levitsky and Way, 2010; Schedler, 2006). The autocratic power of the monarch and his Chancellor was moderated by the Imperial and state legislatures. The Imperial legislature consisted of an upper house, the *Bundesrat*, comprised of delegates from the state legislatures (*Landtage*), and a lower house, the *Reichstag* elected by universal male suffrage. Figure 4.1: The Imperial German Regime: Important Political Posts and People, 1877-1888

German Kaiser and King of Prussia Wilhelm I

- Commander-in-Chief of army and navy •
- Appoints and dismisses Chancellor, Prussian and Imperial Ministers Convenes and closes Bundesrat .
 - Dismisses (with Bundesrat) Reichstag . •

Imperial Military, Executive and Legislature





Sources: Jacobs (1908); Schmidt-Bückeburg (1933); Börner (1984); Berman (2001).

However, if Imperial Germany was an example of competitive authoritarianism, it was a competitive regime where power was heavily concentrated with the Kaiser from the ruling Hohenzollern family, his political appointees, and the Prussian Junker elites (see Figure 4.1). The Kaiser stood completely aloof from parliamentary politics and had the capacity to dissolve the Reichstag at will, provided the Bundesrat gave its approval. And, given the predominant position of Prussia within the Bundesrat (where it filled 29% of the seats), and the Chancellor's role as its Chairman, the essentially Prussian executive had not only an additional veto power over legislation in the upper house, but the capacity to call new Reichstag elections at any time. Neither the Chancellor nor his Ministers were responsible to parliament, and Bismarck regarded the Reichstag with contempt when it attempted to moderate the power of the executive, using all the tactics and resources at his disposal to achieve his policy goals (Stürmer, 1974).

Due to the inegalitarian nature of the Prussian three-class electoral system, the Junker agricultural producers of that state could be sure of control of the Landtag, where their Conservative party won the most mandates in the lower house at every election after 1878 (Kühne, 1994). The upper house consisted of appointed and heredity members, was dominated by a Junker majority (Spenkuch, 1999, 379), and was presided over by the estate owner Otto zu Stolberg-Wernigerode from 1872-77. Because of the importance of Prussia in the Imperial Bundesrat, these agricultural elites could pose a significant problem to any Chancellor who wished to pass legislation which was not in their interests and exert a large amount of influence on them (Puhle, 1980). In the Prussian bureaucracy, East Elbian landowners were granted influential positions. For example, Stolberg-Wernigerode took up the position as Bismarck's Imperial Vice Chancellor in 1878 after serving as President of the Prussian House of Lords, and was able to influence Bismarck's adoption of a protectionist policy stance the following year (Jacobs, 1908). Botho Wendt zu Eulenburg, a descendant of ancient Saxon nobility and the owner of a large estate in the east of presentday Poland, was Prussian Minister of the Interior between 1878 and 1881 (Born, 1959). Imperial government ministries were never established after 1871, but only Imperial Offices under Secretaries of State. Therefore, domestic policy remained the primary preserve of the Prussian state bureaucracy, and subject to considerable influence by agricultural Junker interests politically dominant in that part of the country.

Occupation	Conservative	Liberal	Zentrum	SAPD	Regional	Total
Landowner	77	21	32	0	20	150
Professional	28	77	48	3	13	169
Businessman	8	27	10	4	5	54
Farmer	1	3	1	0	1	6
Industrialist	1	10	1	0	0	12
Total	115	138	92	7	39	391

Table 4.1: Members of the Reichstag, 1879, by Occupation and Party Group

Source: Election results from 1878 election were published by the Statistisches Reichsamt (1879), occupations from biographical handbooks by Haunfelder (1999, 2004, 2010), Schröder (1995).

Thus, as in many authoritarian regimes, policy-making was a decidedly top-down process in Imperial Germany, as the Chancellor and his predominantly Prussian bureaucracy held the power to draft legislation and to veto any bill. However, parliamentary institutions did have the power to modify and strike down any legislative proposals by a simple majority and the responsibility for direct taxation lay with the state governments. Creating supportive majorities at this crucial veto point was a difficult battle for Bismarck from the beginning of his tenure, and became more difficult as it proceeded, driving him to craft shifting coalitions between his 'loyal' Conservative parliamentary supporters and other parliamentary factions.

However, the Chancellor's task of creating parliamentary majorities to pass legislation was made considerably easier by the composition of the Reichstag, which despite Conservative party members' lack of an absolute majority was nonetheless comprised predominantly of aristocratic landowners and white-collar professionals. The parliament was thus a gathering of elites, and proved receptive to elite interests rather than those of the general population, who barely featured among their members. I collected data on the occupations of every member of the Reichstag at the time of the passage of the protectionist tariff bill in 1879.⁶ These data are displayed in Table 4.1, and show that aristocratic landowners were not confined to the ranks of the Conservative parties, but were also represented in Liberal parties, the Catholic Zentrum and regional minority parliamentary groups such as that of the Polish minority in Silesia. They made up a remarkable 38% of the total members

⁶ Data were collected from the biographical handbooks by Haunfelder (1999, 2004, 2010) and Schröder (1995), as well as from the Database of Reichstag Deputies (for members of regional minority parties).

of the Reichstag in 1879, although they comprised a vanishingly small proportion of the Empire's total population. The largest group in the Reichstag by occupation was that of professionals such as lawyers, doctors, teachers and professors, who made up 43% of the total membership. Businesspeople, farmers and workers were notably absent from the parliamentary benches, making up barely 15% of the Reichstag together. The few exceptions, such as the famous Social Democrat August Bebel who had apprenticed as a carpenter and joiner in Leipzig, serve to illustrate the dominance of economic elites in the membership of the Reichstag. In subsequent analysis, I will explore the socio-economic correlates of this distribution of occupations in the Imperial parliament and its consequences for the passage of the tariff bill. I will show that socio-economic features of the Empire's electoral districts, most importantly their highly unequal distribution of land and low levels of urbanization, led to the over-representation of Conservative and landowning members in the Reichstag. The lack of representatives drawn from the mass population weakened opposition to Bismarck's protectionist tariff bill, and the number of Conservatives and landowners in the parliament significantly eased its passage.

4.3.2 Socio-Economic Structures: Landholding Inequality, Low Urbanization and Inequality Weaken the Political Power of Food Consumers

The lack of a strong socio-economic position in the Empire was a significant determinant of the weak political position of German food consumers in the 1870s, and the corresponding strength of the Junker food producers. Low levels of urbanization and associated inequality implied a population of food consumers who did not pose an immediate threat of political unrest, and these socio-economic factors also weakened the presence of anti-protection parties in the Reichstag.

Industrialization in Germany, which drew huge numbers of migrants in search of work from the countryside to the cities, had begun to have a large impact on the demographics of the Empire by the 1870s. Census data displayed in Table 4.2 show that the proportion of employment in agriculture was 44%, with industry, trades and mining making up 34% and 'bourgeois' professions such as commerce, banking and professional services 11%. As

Sector	Workers	% Workers	Share of In-	Avg. Income
			come $(\%)$	$(\mathrm{RM}/\mathrm{Year})$
Agriculture	$8,\!246,\!246$	40.6	29.7	407
Household Servants	1,722,506	8.5	6.5	428
Textiles	$850,\!859$	4.2	3.5	460
Water Transport	$84,\!301$	0.4	0.5	604
Industry/Trades	$3,\!013,\!476$	14.9	16.4	614
Woodworking	$521,\!660$	2.6	2.9	634
Banking/Commerce	$1,\!133,\!278$	5.6	6.6	656
Construction	$946,\!583$	4.7	6.3	751
Mining	431,707	2.1	3	788
Metalworking	528,714	2.6	3.8	810
Land Transport	352,739	1.7	3.2	1018
Printing	$69,\!643$	0.3	0.7	1198
Professionals/Civil Service	1031147	5.1	16.9	1855
Unemployed	$1,\!354,\!486$	6.7		
Total	20,287,345			

Table 4.2: Occupational Census Data, Germany 1882

Source: Census data on number of workers from Statistisches Reichsamt (1884). Data on average wages in each sector are 1882 data from Hoffmann (1965, 449-493).

peasants—food producers, if not necessarily on a large capitalist scale—moved out of agriculture and became industrial workers, the number of food consumers grew in Germany, and it continued to grow through the course of the 1880s (Berman, 2001, 442).

However, urbanization was still in its early stages in the 1870s, with the proportion of the population living in large towns and cities with over 20,000 inhabitants only around 12.5% in 1871, although this figure was to grow swiftly to 34.7% by 1910 (Grant, 2005, 56-67). Therefore, large concentrations of food consumers, who would find it easier to organize in violent or conspicuous political opposition to higher food prices, and pose a threat to the regime, were not yet a feature of the Imperial German landscape in the 1870s. Food consumers did not occupy a dominant economic position within Germany, with agriculture still making up almost one-third of national income. Urban migration in Germany also carried with it economic risks to the urban population which left many of them impoverished and politically immobilized. Reflecting contemporary accounts which describe precarious, unsafe working conditions in large industrializing cities such as Berlin, Grant (2002, 4) shows what he describes as a "hollowing out" of the income distribution in Prussia in the course of the nineteenth century. Simultaneous increases occurred in the number of rich individuals paying the highest tax rate, and in the number of the were very poor who were excused from paying any income tax whatsoever. Inequality was significantly higher in urban areas versus rural areas, with an average Gini coefficient for income of 0.43 versus 0.35 in $1896.^7$

The socio-economic position of food consumers in Germany in the 1870s was not one which gave them the resources to organize in overt and direct political opposition to higher food prices, in the form of protests or even large-scale food riots. Furthermore, low levels of urbanization and inequality weakened the position of the working class and food consumers in parliamentary politics. As I will show in more detail below, these factors of a broader structural transformation in the German economy were driving support for Liberal parties and the Social Democrats, but examination of voting returns from 1878 show that the Social Democratic movement (the only party which proved to vote en masse against higher food prices) was still very weak, winning only two percent of seats in the Reichstag and about 13% of the popular vote. Huge electoral victories for the Social Democratic movement came only after 1890, as a consequence of continued urban migration, industrialization and the expiration of the repressive Antisocialist Laws (Pack, 1961; Berman, 2001).

The socio-economic foundation of the Junkers' power in Imperial Germany, on the other hand, was relatively strong. It lay in the ownership of land, not small parcels of land distributed equally across the rural population but large estates owned by a very small agricultural elite. The distribution of land ownership was unequal in Prussia in the late nineteenth century, and it was also concentrated in the hands of a relatively small group of elites. A recent study analyzes handbooks listing the owners of large estates, not just the size of landholdings, to show that royal and aristocratic families owned the majority of large farms in eastern Germany in the late 1800s, with the ruling Hohenzollern family and the Prussian state the largest two landowners (Eddie, 2008, 86-122). The size of agricultural holdings in Prussia was large, averaging nine hectares in 1882 compared to 7.6 hectares in the Empire overall.⁸ Over 52,000 farms in Prussia were larger than fifty

⁷ This is the earliest figure given by Grant (2002). It must be noted that overall levels of inequality in Germany were much lower than in the United Kingdom throughout the course of the nineteenth century (Grant, 2002, 8).

⁸ All 1882 data on the distribution of land are from agricultural census returns published at the administrative district level by the Statistisches Reichsamt (1885). These are the returns from the first agricultural

hectares, the vast majority of the 66,600 total of this size in Germany, and of the 515 farms in Germany which were over 1,000 hectares in size, only four were located outside of Prussia. I collected data on the size and distribution of land holdings in the Empire and calculated Gini coefficients for each administrative district (*Verwaltungsbezirk*).⁹ The mean of this measure of land inequality is 0.72 across the whole of Germany, well above levels of land inequality found in contemporary OECD countries and similar to levels found in the Middle East or Latin America today (see Appendix A). It ranges from 0.43 in the southwestern district of Karlsruhe to 0.93 in the East Prussian district of Danzig. I also compared these data to Ziblatt's (2008b) landholding Gini coeffcients calculated from the 1893 agricultural census returns. The high correlation between the two variables (r = 0.87) shows that the inegalitarian distribution of land in Germany did not change to a great degree in the latter part of the nineteenth century, and that this important source of producers' socio-economic power remained throughout the period of interest in this study.

Large landholdings did not simply give East Elbian agricultural producers a stable economic base and thus a large degree of independence and political influence, but also a powerful social position as landlords and employers which was led to gross political inequality and the privileging of Junker interests over those of others. These 'bread lords', to take Margaret Anderson's (2000) use of the German term Brotsherr, had a massive influence over the inhabitants of their estates and neighboring areas, despite the abolishment of serfdom at the beginning of the nineteenth century and the administrative reforms noted above which reduced their formal roles as district administrators. The Junkers and their deputies continued to dominate local government, running local schools, electoral boards, tax collection, poor relief and often the village Lutheran church. They also served as members of the Landtag and Reichstag themselves, as shown in Table 4.1. The Junkers were able to compel locals to follow their political positions through traditional relationships of authority and subservience, but also through threats and violence as necessary. Crucially, this was the case even after the institution of universal male suffrage in 1871, and a key cause of the high correlation between landholding inequality and support for Conservative candidates found by Ziblatt (2008a) for Prussia and confirmed below for the whole Empire.

census carried out in the Empire.

 $^{^9}$ The data definition of a land holding or 'agricultural unit' are given by the Statistisches Reichsamt (1885, 1*-107).

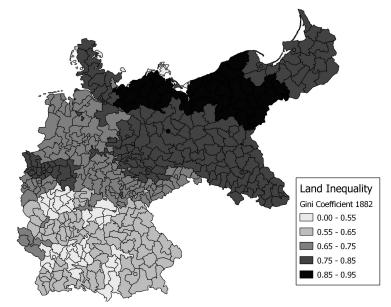


Figure 4.2: Landholding Inequality in Imperial German Electoral Districts, 1882

Source: 1882 data collected from Statistisches Reichsamt (1885). Data matched with QuantumGIS to the map vector layer by Ziblatt (2007).

For example, workers were routinely fired for voting for the 'wrong' (i.e. liberal or Social Democratic) candidate, a practice which was widely seen as employers' right; even in 1890 a conservative weekly encouraged estate owners to cooperate to make sure that workers thrown out from one estate for such insubordination would not find work elsewhere (cited in Anderson (2000, 159)). Districts characterized by higher levels of landholding inequality also had higher levels of electoral fraud (Ziblatt, 2009). The prestige and authority commanded by aristocratic landowners allowed them to place considerable pressure on local politicians to follow their preferred policies, even if those politicians were not members of Conservative parties, as I have shown for the case of the repressive Antisocialist Laws in 1878 (Thomson, Forthcoming).

The low levels of urbanization and high levels of landholding inequality which characterized the German Empire in the 1870s had *direct* political effects. Without reaching a critcal mass of concentration in cities, food consumers did not pose the risk of threatening demonstrations or food riots, while Junkers' positions as landlords, employers and traditional elites gave them considerable influence over local politics. This gives a first set of structural reasons to suspect that food producers' interests would be weighted more heavily than those of food consumers in policy-making by the authoritarian regime. However, these socio-economic structures also had important *indirect* effects on national politics. They did so by having a significant impact on the constitution of the Reichstag, and its members' occupations and party affiliations. Thus, consumers were relatively weak even at this critical veto point where they had the greatest chance of pushing policy towards lower food prices due to their enfranchisement via universal male suffrage.

I estimated two multinomial logistic regressions taking the categorical occupation and party data laid out in Table 4.1 as dependent variables, respectively. They estimate the likelihood of a Reichstag deputy being in a given category, compared to the base category (landowner and Conservative, respectively), as a function of the socio-economic characteristics of their electoral district. As independent variables I included variables collected from census data published in government statistical yearbooks. I list only the names and short descriptions of the variables here; for detailed sources and descriptions of the variables, see Section A.2, Appendix A.

- *Landholding inequality*, a Gini coefficient calculated from data on the size and distribution of agricultural units in each administrative district;
- *Economic inequality*, as the ratio of unskilled wages to total GDP per worker in each administrative district;
- *Urbanization*, the proportion of workers in an electoral district who are not employed in agriculture;
- % *Catholic*, the proportion of the population self-identifying as Catholic in each administrative district;

The results of these models are reported in Table 4.3 and the effects of landholding inequality and urbanization are graphed in Figure 4.3.¹⁰ They clearly show the effects of socio-economic structures on the occupational and party composition of the Reichstag at the time the protectionist tariff bill was passed in 1879. Higher levels of landholding inequality were positively and significantly correlated with the likelihood of Conservative

¹⁰ All post-estimation analysis in this chapter, including predicted probabilities and graphs, was carried out using the package SPost in Stata (Long and Freese, 2006).

party victories (Party Model), but they were also correlated with electoral victories by aristocratic landowners (Occupation Model). On the other hand, in areas with high levels of landholding inequality, representatives from parties less supportive of agricultural producers interests—most notably Liberals and Social Democrats—were significantly less likely to be elected. Similarly, these areas were significantly less likely to elect representatives without a personal vested interest in higher agricultural prices, such as professionals, or businessmen.

Table 4.3 and Figure 4.3 also show the negative impact low levels of urbanization had on the chances for food consumers' representation in the Imperial legislature. In those areas where urbanization was high, representatives from free-trading parties like the Liberals and Social Democrats were more likely to be elected—more likely than all other party members. Highly urbanized districts were also far more likely to elect professionals and businessmen who did not have a direct interest in higher food prices. However, due to the low levels of urbanization, and high levels of landholding inequality, across the Empire as a whole, these correlations did not lead to a predominance of food consumers' voices in the Reichstag. Instead, even the legislature—where the food-consuming majority had a chance to veto high food prices due to the institution of universal male suffrage—was dominated by Conservative landed interests. As I will subsequently show, these interests duly passed protectionist legislation which raised grain prices against the interests of the many food consumers and in favor of the few food producers.

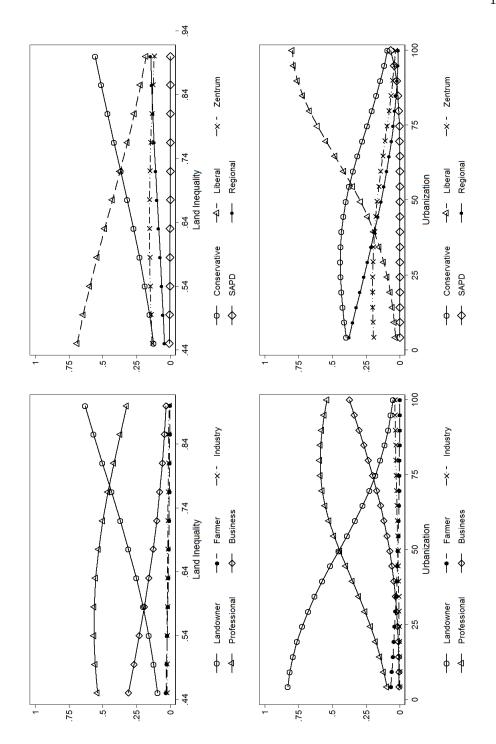
		Occupation Model	Model			Party	Party Model	
	Professional	Businessman	Farmer	Industrialist	Liberal	$\operatorname{Zentrum}$	SAPD	Regional
Land Gini	-5.38***	-9.25^{***}	-9.58***	-6.33	-6.33***	-3.64**	-14.68***	-0.71
	(1.37)	(2.07)	(2.79)	(4.01)	(1.73)	(1.67)	(4.70)	(2.03)
Inequality	0.46	10.14^{*}	-4.28	30.45^{***}	-2.14	9.19^{*}	45.36^{***}	10.14^{**}
	(4.40)	(6.08)	(10.50)	(11.37)	(5.24)	(5.24)	(13.42)	(5.10)
Urbanization	0.47^{***}	0.08^{***}	-0.02	0.06^{***}	0.05^{***}	-0.003	0.15^{***}	-0.02
	(0.01)	(0.01)	(0.02)	(0.02)	(0.01)	(0.01)	(0.04)	(0.01)
% Catholic	-0.002	0.001	-0.03***	0.002	-0.02**	0.05^{***}	-0.04^{*}	0.03^{***}
	(0.004)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)
Constant	1.36	-4.05	7.56	-17.54^{***}	1.31	-4.80^{*}	-25.88***	-5.83**
	(2.20)	(2.81)	(6.17)	(5.93)	(2.54)	(2.85)	(6.57)	(2.37)
Obs.	391				392			
Pseudo R2	0.1498				0.28			
Wald Chi-sq	118.46				184.41			
Prob. > Chi-sq	< 0.0001				< 0.001			

Table 4.3: Results of Multinomial Logistic Regressions Estimating Reichstag Membership by Occupation and Party,1878

Standard errors in parentheses. $\label{eq:product} \begin{array}{l} * \ p < 0.01, \ *^* \ p < 0.05, \ *^* \ p < 0.01. \end{array}$

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Figure 4.3: Graphs of Effects of Landholding Inequality and Urbanization on Reichstag Member Occupation (Left) and Party Affiliation (Right)



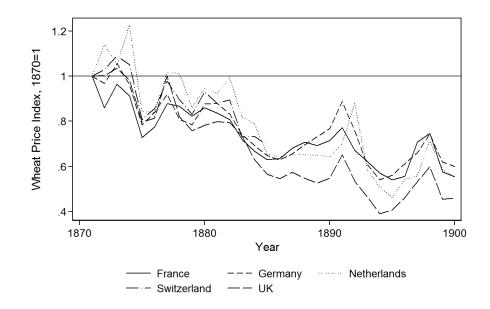
Food consumers were not in a socio-economic or institutional position to pose a threat to the Imperial German regime in the 1870s. They were divided by inequality and diverging economic interests, spread across the Empire in a way which was not conducive to collective action, and neutered by a constitution which allowed them them the vote (if they were male), but not a powerful position in the complex web of institutions which made Imperial policy. Agricultural producers, on the other hand, occupied a number of powerful and threatening positions within the same institutional web which made them dangerous to the Chancellor. The Prussian aristocratic landowning class dominated the armed forces, the Prussian Landtag and the bureaucracy, making them both wielders of force in the Empire and policy veto players at least twice over. Also, the Junkers' ownership of large estates gave them a relatively autonomous economic position and a social status akin to feudal lords. In what follows I will show how this skewed balance of power in favor of agricultural producers had the effect of dictating the regime's choice of a protectionist agricultural policy in the 1870s.

4.4 Policy Preferences of Producers and Consumers

It is clear that the Imperial German regime in the 1870s was confronted by political threats from both food consumers and agricultural producers, and did not face the question of its future rule complacently. However, the threat to the regime posed by agricultural producers was greater, and was translated by the regime into a pro-producer policy by which it sought to secure its tenure in power. What exactly was involved in a pro-producer policy in the context of German politics in the late 1870s? A pro-producer policy in the late 1870s involved state intervention in agricultural markets in order to guarantee returns to farmers, who during previous decades of relatively high international prices for their produce had been in favor of free trade. The change in agricultural policy which was seen in Germany in the late 1870s was a result of this shift in policy preferences among agricultural elites.

Europe was gripped by a severe economic crisis during the 'Great Depression' beginning in 1873, which in Germany quickly led to loud demands for protectionist tariffs on textiles, iron and machinery. These demands were articulated by newly-formed lobby groups such as the

Figure 4.4: Wheat Prices in Europe, 1870-1900



Source: Index calculated from annual averages in national currency units published by Földes (1905).

Central Association of German Industry (*Centralverband Deutscher Industrieller*, CVDI), and found sympathy with the Kaiser in particular, but were initially ignored by the broader regime around Bismarck, with the government eliminating the last of its protectionist tariffs by 1877 (Torp, 2005, 148-149). Not as easily ignored was the impact of cereal imports from the United States and Russia which led to decreases in the prices of grain by around twenty percent between the beginning and the middle of the 1870s. Rather than affecting industrialists, who did not yet belong to the core of the Prussian elite or make up a large group in the Reichstag (see Table 4.1), these price shifts affected the dominant Junker political class. A long-term structural shift in world agricultural markets was making itself felt in Europe; effectively, by being linked to the North American Prairies and the Ukranian steppe by railroads and steamships Germany went from being a country of relative land abundance to relative land scarcity. Large-scale German agriculture would never be competitive again.¹¹ As the domestic market price of grain dropped in the face

 $^{^{11}}$ See Figure 4.4, or for a more detailed account of national variation in agricultural prices see O'Rourke (1997).

of increased foreign supply, agricultural interests in Germany began to abandon their freetrading stance—which in any case was merely a function of previously high prices—in favor of tariffs which would protect them from the competition of imported grain (Lambi, 1963, 131-149). Already burdened by high levels of debt, low productivity and increasing wages due to increased labor demand through industrialization and urban migration, the Junkers were in dire economic straits. Because of the size of their estates and the relatively poor quality of the soils in East Elbia, they were not able to easily adjust to changing prices by shifting production to more profitable commodities such as dairy or meat (Schissler, 1980, 106-107). The lifestyle demanded by their social status was expensive, and most estates were heavily mortgaged in order to support large domestic staffs, residences in Posen, Danzig or Berlin, and other trappings of aristocratic life (Pflanze, 1990, 11). In sum, in the mid-1870s the Junker aristocracy stood before an existential challenge, confronted with the danger of bankruptcies, foreclosures and the division of their great estates into a number of small farms; a reversal of the agricultural consolidation process from which they themselves had profited in the eighteenth century. Their demands of the regime for protection from foreign competition were thus undergirded with a real sense of urgency and concern for the durability of their political and economic positions.

That the interests of German agricultural producers stood in stark opposition to those of urban food consumers is relatively clear. Any increases in returns to farmers carried bitter consequences for the real incomes of the rapidly growing, impoverished urban proletariat who as a consequence were required to pay more for food. Bad harvests in 1879 and 1880 already had driven food prices to record highs in Germany before the effects of the protectionist tariffs had arrived (Pflanze, 1990, 44). In addition, the pressure of increasing living costs on wages for industrial companies meant that sector was, in principle, in favor of free trade in agriculture (Torp, 2005). Therefore, it is critical to examine exactly how the Imperial German regime came to privilege the interests of agricultural producers over food consumers after 1878, how it was able to craft the coalition of 'iron and rye' against the interests of workers and industrialists, and how this policy was a function of an authoritarian survival strategy which responded to the acute political threats posed by food producers but not to that lesser threat posed by food consumers.

4.5 Making Policy: The Effects of Political Threats on Agricultural Protection

Agricultural policy was an important piece in the complex political puzzle which Bismarck manipulated to shape both domestic and international developments in a way which maximized the stability of the Prussian, later Imperial German, regime. The unification of Germany and its eventual constitutional form outlined above were a primary aspect of this, famously, however the creation of the Empire did not solve all the regime's problems in one fell swoop. Instead, it shifted the focus of the regime from international to domestic politics, or in Bismarck's view, from 'external' to 'internal' enemies (Stürmer, 1974). The first target of the Chancellor's suspicions were Catholics; from 1871 to 1878 he waged a 'cultural struggle' or *Kulturkampf* against this 'foreign influence' in the Empire, for example by imposing criminal penalties on electioneering from the pulpit (Anderson and Hayami, 1986). After 1877, the government of Wilhelm I and Bismarck took a more decisive, repressive turn in domestic policy recognized by some historians as the 'second founding' of the German Empire. This shift in policy included the repression of Social Democrats through the Antisocialist Laws and the elimination of more liberal elements within the Imperial bureaucracy (Barkin, 1987; Tipton, 2001).

4.5.1 The Introduction of Protectionist Legislation: Convincing Bismarck

The third element of Bismarck's authoritarian 'second founding' of the Empire, designed to guarantee the stability of the Imperial regime, were the famous 'iron and rye' protectionist tariffs. Not by coincidence, these came in 1879, on the heels of the depression and the collapse of German grain exports, and as agricultural producers organized and lobbied in favor of protectionism. In 1876, 481 East Elbian agricultural producers met in Berlin to establish the 'Association of Tax and Economic Reformers' (*Vereinigung der Steuer- und Wirtschaftsreformer*, VSW). The VSW was a modern mechanism for the representation of an essentially feudal, aristocratic elite: around 450 of the 481 total members were estate owners, as were three-quarters of the Association steering committee and the entire executive committee. Eleven members of the VSW were members of the Prussian House

of Lords (Gottwald, 1986, 358-360).

The goal of this lobby organization was the preservation of the economic, social and political status of the Prussian landowning aristocracy, although they cynically framed their arguments as promoting 'Christian' economic policy in the 'public interest'. Initially calling for the reduction of taxes on land, as well as for increased indirect taxation and capital taxation, the VSW quickly became the most influential champion of protectionist agricultural policies to increase the incomes of famers (Torp, 2005, 151). The VSW lobbied the government in favor of protectionism, but also worked hard in the provinces to convince small farmers—who until recently had been convinced free-traders—of the importance and virtues of a tariff on grain imports, and to mobilize voters to support the conservative parties which shared their views (Gottwald, 1986, 361-362). In October 1877 meetings were held between the VSW and the CVDI which aligned the Junkers' demands with those of industrialists along the exact lines of the eventual 'iron and rye' policies enacted by Bismarck only two years later (ibid.).

Agricultural producers did not have to go far in order to access the highest levels of the Imperial and Prussian bureaucracy and advocate their preferred policies; in some cases, they themselves comprised the highest levels of the bureaucracy. To take only one prominent example, Otto zu Stolberg-Wernigerode, Bismarck's Vice Chancellor and Deputy Prussian Minister President at the time of the passage of the first tariff law, was the founding Chairman of the VSW and a former President of the Prussian House of Lords (see Figure 4.1 and Jacobs (1908)). He was Bismarck's deputy and advisor in the highest affairs of state, including both domestic and foreign affairs.¹² In the question of tariff reform, Bismarck consulted Stolberg-Wernigerode for his opinion on how best to guarantee the returns to domestic industries in the face of foreign competition and protectionist policies (Canis et al., 2008, 604).

Considering the place of agricultural producers within the Imperial regime, it is unsurprising that Bismarck swiftly became a passionate advocate of the VSW's policies which implied protection for agriculture and increased food prices for urban residents. During 1878 he became aware of the role which a protectionist tariff could play in increasing the

 $^{^{12}}$ See, for example, the voluminous correspondence between the two in Bismarck's collected writings (Canis et al., 2008). Stolberg-Wernigerode was a key player in vital diplomatic agreements such as the League of the Three Emperors.

returns to grain-growers, and he was prepared to grant industrialists protection in return for the same in the case of grain imports (Rosenberg, 1967, 183). He also became convinced by the positions of the VSW on land taxation, complaining that landowners were compelled to pay 'double' taxes, on both their land and their income from farming (Pflanze, 1990, 45). It cannot be overlooked that the Chancellor himself, as an estate owner, was also a victim of the sinking grain prices. In October of the same year Bismarck gave the following response to the question of whether he intended to buy a Bavarian estate:

A Bavarian estate! I have not the least intention of buying one. I lose enough on the one I bought in Lauenburg [South-East of Hamburg, in Holstein – HT], where the mortgage eats up the income of the whole property. How could an estate yield anything, when a bushel of corn is sold at the present low price? ...It is ruining our entire agriculture. There will be no remedy until there is an increase in railway rates or a duty on corn.¹³

In general, the Chancellor's official correspondence in the last third of 1878 shows an increasing sensitivity to the international competitiveness of German industries, and particularly the relative position of agricultural producers. He complained repeatedly to his highest officials of hearing reports of sick cattle being allowed across the border from Austria, despite an Imperial ban on the import of livestock suspected of illness (Canis et al., 2008, 613, 617). The Chancellor's seemingly paranoid concern for animal health in fact had its roots in a desire to prevent competition from the East and was later expanded into a full-blown ban on meat and livestock imports for 'hygenic' reasons (Hunt, 1974). He also suspected that government railway policies were giving Russian and Austrian grain exporters an advantage in the German market (Canis et al., 2008, 608-609). On the other hand, he displayed a callous disregard for the interests of food consumers, writing in August 1880 about the complaints of left-liberal politicians over the increasing price of food,

We must not yield to the screaming of the progressives, if we do not want to ruin our election chances with the rural population. The latter expect *their* minister, more than any other, to protect agrarian interests, and doubtless they

¹³ Quoted in Lambi (1963, 165).

have a right to expect that.¹⁴

Bismarck did not believe that lower food prices would be conducive to the stability of the Empire; on the contrary, he refused to consider poor relief for urban workers struggling to afford food and was of the opinion that the government must be concerned with the welfare of "producers, not consumers" (ibid.).

The Junkers and the VSW were supporters of Bismarck and his policies. However, they were also the very same class which posed the greatest threat to his position; the Prussian landowning aristocracy also dominated the military and civil service, and had plotted to remove Bismarck from office in 1872. In the end, agricultural producers had been converted to the cause of protectionism at least a year earlier than the Chancellor, had organized to advocate protectionist policies and cut a deal with industrialists to create a majority for them. Bismarck came around to his protectionist stance only *after* lobbying by the VSW—industrialists had been clamouring for a tariff for years for no avail—and as a move to shore up the political support base of the regime, the East Elbian agricultural producers who would fade into insignificance without moves to increase grain prices, and could replace the Chancellor with a more amenable politician (for example his deputy) should he not respond to their needs.

4.5.2 Passing the Tariff Bill in the Reichstag: Elite Politics, Voter Preferences and Economic Interests

However, the influence of agricultural producers on the Imperial German regime did not end with their powerful position within the institutions of the empire and Prussia, or with their ability to organize and lobby the government to propose protectionist legislation to the Reichstag. The Chancellor's lobbying on their behalf, and their own presence in the legislature also assisted the passage of the protectionist tariff bill in the Reichstag. In this section, I present quantitative analyses of deputies' voting patterns on the bill in 1879, and show that its passage was the result of a complex mix of elite bargaining, the personal interests of Reichstag members, and the interests of voters and economic actors in the Empire.

¹⁴ Quote from a letter to Prussian Minister of Agriculture Robert Lucius von Ballhausen, reproduced in Pflanze (1990, 44). Italics in the original.

	Conservative	Liberal	Zentrum	Social Democrat	Regional	Total
No	2	93	1	7	14	117
Absent	4	11	9	0	17	41
Abstain	0	0	2	0	0	2
Yes	107	21	79	0	6	213
Total	115	133	92	8	39	387

Table 4.4: Parties in the Reichstag, 1879, and Votes on July 12 Tariff Law

Source: Election results from 1878 election were published by the Statistisches Reichsamt (1879), roll-call votes by Deutscher Reichstag (1879).

When the Chancellor presented the first of his 'iron and rye' tariff bills to the parliament in 1879, the bill was carried by the predominantly agrarian Conservative parties and the Catholic *Zentrum*, as is shown in Table 4.4. Less than two percent of Conservative and Zentrum Reichstag members voted against the bill, while seventy percent of Liberals, all Social Democrats and around half the members of regional parties such as the Poles and Alsatians voted against protectionsim and in favor of lower food prices.

I estimated ordered logistic regressions which examine the correlates of votes for the 1879 tariff bill on the floor of the Reichstag. In varying specifications, I weigh the importance for the vote of elite politics, the support of each electoral district for free trade parties, and the economic composition of electoral districts.

I therefore use the data on party affiliation and member occupation reported in Tables 4.1 and 4.4. I also collected data from official government statistical yearbooks to create the following variables, in addition to those in Section 4.3.2, measuring the socio-economic characteristics of electoral districts, and matched them to the voting patterns of each district's deputy in the Reichtag in 1879. As above, I list only the names of the variables here; for detailed sources and descriptions of the variables, see Section A.2, Appendix A.

- *Hectares of rye per capita*, the number of total hectares planted in rye in 1879/80 divided by the total population of each administrative district;
- *Cattle per capita* is the total number of cattle counted in each administrative district in the 1883 livestock census, divided by the administrative district's total population;
- *Light industry*, the proportion of workers employed in textile production, woodworking and printing in each administrative district;

- *Heavy industry*, the proportion of workers employed in mining and metalworking in each administrative district;
- *Commercial*, the proportion of the population of each administrative district employed in the banking and commercial sector.

The results of six ordinal logistic models are reported in Table 4.5. Model 1 examines the effects of the structure of the local economy on Reichstag member voting; I predict that a greater presence of those sectors privileged by the tariff bill, agriculture and industry, in a member's district will be associated with greater support for the tariff bill. Model 2 weighs these economic interests against those of electors by including a variable measuring total support for free-trading parties in each district—those parties being Social Democrats and Left Liberals. I predict that support for free-trading parties will be associated with a lower likelihood of protectionist bills as members respond to the preferences of their electors. Model 3 examines the correlation between the occupation data reported in Table 4.1 and voting behavior. I expect members with a personal interest in higher food prices landowners, and to a lesser extent small-scale farmers— to be more likely to vote for protection, while businessmen with an interest in lower food prices will be less likely to vote for protection. Model 4 includes dummy variables for the two main parties which Bismarck's bargain aligned in favor of protection, Conservatives and Zentrum. Model 5 compares the occupational model against the effects of free trade party support and broader economic interests from Model 2. Model 6 compares these broader mass interests to the effects of party affiliation.

The results of Model 1 show how the economic features of members' districts were correlated with their voting behavior on the tariff bill. Without controlling for members' occupation or party affiliation, the presence of industries which benefited directly from the protectionist tariff is positively correlated with support for the bill. Areas with lower levels of urbanization, and thus higher levels of agricultural employment were more likely to have their member vote for protection, although interestingly no differences are seen between grain-growing areas and those with greater levels of pastoral agriculture. Members from industrial areas, whether employment was concentrated in light or heavy industry, were more likely to vote for protection from foreign competition through the iron tariff. Model 2 augments this specification by looking at a measure of the electorate's preferences for free trade—support for Social Democrats and Left Liberals who vocally campaigned on an anti-protection platform in 1878. The highly significant negative coefficient on this variable indicates that mass preferences for free trade were indeed reflected by members' voting patterns, as they were less likely to vote for protection where these parties had greater electoral support.

These two models show the direct correlations between structural features of electorates and their members' voting patterns. However, the reader will recall that these same structural features had an impact on the composition of the Reichstag in terms of members' occupations and party affiliations, as shown in Figure 4.3. Therefore, their direct effects on voting patterns should be considered alongside their indirect effects through these individual characteristics of each member.

Models 3 and 4 demonstrate that the indirect effects of structural features of electoral districts, through their effects on the occupations of members elected and their party affiliation, are significantly correlated with voting patterns on the tariff bill. Aristocratic landowners were far more likely to vote for protection than Professionals such as lawyers and doctors, and significantly more likely to vote for higher food prices than small-scale farmers and businessmen. Members of the Prussian House of Lords were also more likely to vote for protection. Model 4 shows the impact of Bismark's coalition of Conservative and Zentrum party members on the tariff bill votes. The protectionist coalition was, to a certain extent, the result of Bismarck's bargaining on the Junkers' behalf: he had recently repealed many of the most discriminatory anti-Catholic measures of the *Kulturkampf* which

	(1)	(2)	(3)	(4)	(5)	(6)
	Mass	Mass	Occ	Party	Comb	Comb
Landowner/Arist.			0.68***		0.68**	
			(0.25)		(0.29)	
Farmer			-0.69		-0.92	
			(0.79)		(0.84)	
Industrialist			0.57		0.28	
			(0.64)		(0.70)	
Businessman/Worker			-0.40		-0.34	
			(0.30)		(0.34)	
Pr. Army			0.54		0.44	
			(0.36)		(0.38)	
Member Pr UH			1.09^{**}		1.30^{***}	
			(0.44)		(0.48)	
Cons. MP				4.70^{***}		5.01^{***}
				(0.47)		(0.52)
Zentrum MP				3.75^{***}		3.83^{***}
				(0.37)		(0.45)
Free Trade El. Supp.		-0.022***			-0.019^{***}	0.0027
		(0.0040)			(0.0042)	(0.0050)
Inequality	-6.31	-5.71			-7.65	12.0
	(6.45)	(6.63)			(6.96)	(9.23)
Urbaniz.	-0.031***	-0.026***			-0.019**	-0.020**
	(0.0073)	(0.0076)			(0.0081)	(0.0094)
Land Gini	-0.22	0.54			-1.15	-1.54
	(1.56)	(1.63)			(1.73)	(2.11)
Hec. Rye/Capita	0.82	0.60			-0.017	-0.45
	(2.43)	(2.51)			(2.63)	(3.17)
Cattle/Capita	0.77	0.11			0.46	0.19
	(1.07)	(1.10)			(1.15)	(1.42)
Light Ind.	5.36^{**}	5.01^{**}			5.80^{**}	3.41
	(2.20)	(2.27)			(2.31)	(2.73)
Heavy Ind.	11.3^{***}	8.79**			10.6^{***}	3.06
	(3.87)	(3.90)			(4.06)	(4.74)
Commercial	-0.14	0.97			3.51	-3.07
	(6.38)	(6.42)			(6.67)	(8.69)
Observations	373	373	372	373	372	373

Table 4.5: Results of Ordered Logistic Regressions Estimating Votes on Tariff Bill, 1879

Standard errors in parentheses

* p < 0.10, ** p < 0.05, *** p < 0.01

0 is No; 1 is Absent; 2 is Abstain; 3 is Yes.

Professionals are the base category for Models 3 & 5.

prepared the ground for an alliance with the Catholic parliamentary faction. Members of these parties were far more likely than liberals, Social Democrats or regional minority members to vote for protection.

Models 5 and 6 demonstrate the direct effects of structural factors on the tariff votes controlling for their indirect effects through members' occupation and party affiliation. They show that indirect effects through party affiliation were more decisive than those operating through members' occupation. Model 5 estimates the effects of structural and mass features of the electorate after controlling for occupation, and shows that deputies from more agrarian and industrial districts were still significantly more likely to vote for higher food prices. The preferences of the electorate for free trade and lower food prices were also significantly correlated with votes against the bill after controlling for member occupation. In Model 6, on the other hand, which controls for party affiliation, only a larger proportion of food consumers in a district is correlated with votes against protection and high food prices.

These models allow me to conclude that the passage of the tariff bill was the result of a complex mix of structural factors' indirect and direct effects, electoral signals, as well as political bargaining and elite political preferences. Through determining the composition of the Reichstag, socio-economic structures in electoral districts had effects on the passage of the protectionist bill. However, the ability of Bismarck to bring the Catholic Zentrum into the protectionist coalition along with the Junkers, and the personal preferences of the members due to their occupations also had important effects on voting patterns. Members from urban areas were less likely to vote for protection even after controlling for party affiliation, but the preferences of the electorate for free trade, as shown in their support for free trading parties, had a weaker association with votes against the bill.

4.6 The Effects of Agricultural Protection after 1879

The protectionist tariff enacted in 1879 could not stop the steady decline of grain prices in Germany; as I show in Figure 4.4, prices continued to drop through the decade until the Kaiser's death in 1888 and reached their lowest point in the early 1890s. However, the government's policies were able to have a significant effect on the *relative* incomes of German farmers compared to their competitors overseas, and a corresponding effect on the

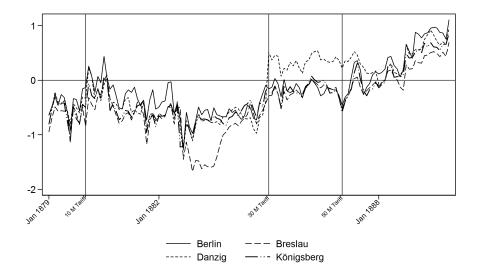


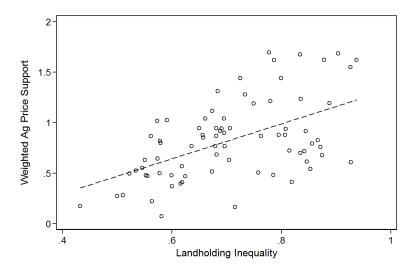
Figure 4.5: German Wheat Prices Compared to London Price, 1879 – 1890

Vertical lines indicate the imposition of the 10- 30- and 50-Mark tariffs in 1880, 1885 and 1887, respectively (Teichmann, 1955). All data are the difference between the average monthly German price (including tariffs) and the average monthly London price, expressed in US dollars per 10kg of wheat. Source: Jacks (2005, 2006); missing data for 1881 and 1884 filled in with data from Kaiserliches Statistisches Amt (1881, 1884a).

real incomes of food consumers in the Empire compared to those in free-trading countries. The initial tariff of 10 Marks per ton of wheat, rye and oats, for example, was increased to 30 Marks in 1885 and then 50 marks in 1887, so that by the end of the 1880s grain prices, even in cereal-exporting East Germany, were above those in the free-trading United Kingdom (see Figure 4.5; prices in the cities of western Germany were significantly higher).

East German grain exports sank rapidly as domestic prices increased above those on world markets; exports of wheat from the Empire shrank from almost 180,000 tonnes in 1880 to 1,100 tonnes in 1888 after the imposition of the 50 Mark tariff (Teichmann, 1955, 196). New markets in the growing cities of western Germany were found for the Junkers' grain. Simultaneously, bad harvests in Germany in 1879 and 1880 interacted with the new tariffs to create something of a 'food crisis' in German cities from 1879-1881, when wholesale prices for rye—the staple of German bakers—increased by almost fifty percent from 132.8 to 195.2 Marks per ton (Pflanze, 1990, 43).

Figure 4.6: Landholding Inequality and Weighted Agricultural Price Support Level, 1879-80



German food producers were therefore the winners of the protectionist tariffs first introduced in 1879, and food consumers were the losers. However, even within the ranks of farmers the gains from the protectionist regime were unequally distributed and concentrated among the large landowners most loyal to the monarchy. Consider Figure 4.6, which shows the relationship between regional landholding inequality and a weighted measure of agricultural price support from the 1879-80 growing season directly following the first tariff bill.¹⁵ This graph shows that the areas of the Empire characterized by large average landholdings, the same areas dominated by the landed Junkers as discussed at length above, received disproportionately large increases in rents from the protectionist tariff per agricultural worker.

This finding corresponds with Rosenberg's (1967, 183-187) argument that the large Prussian landowners were the main economic benefactors of Bismarck's legislation, and as a consequence they did not experience the degree of economic distress which they would

¹⁵ The weighted agricultural price support measure is the sum of the production of four protected grains (wheat, oats, barley and rye), multiplied by their Nominal Rate of Assistance, or the percentage by which their price was increased by the tariff bill. I then weighted this by the total agricultural workforce, $\frac{\sum_{i=1}^{n=4} Production_i \times NRA_i}{AgWorkforce}$. Data was only available to construct this measure by administrative district, not electoral district. I am grateful to Jan Pierskalla for sharing his method for constructing this variable.

have during this first "great depression" without trade protection. Without the extreme declines in grain prices seen in previous agricultural depressions, forced land sales were not endemic, farm values remained relatively stable and allowed the Prussian aristocracy to borrow against them to maintain their social and political position in the country.

In this economic variant of the *Sonderweq* argument, by passing the protectionist tariffs, Bismarck was attempting to stabilize the "endangered traditional political and social power hierarchy" in the face of the depression of the 1870s (Wehler, 1969, 105). In the long term, by freezing the agrarian class structure of Imperial Germany, the protectionist grain tariffs of 1879 laid the foundation for the continuation of the monarchy until the First World War. For Gerschenkron (1943, 47) the increases in grain prices were even a direct economic cause of autocracy and Fascism in Germany until the 1940s: "at every stage of their development in the Hohenzollern monarchy as well as in the Weimar Republic the forces of democracy were hamstrung by the opposition of the East Elbian aristocracy." The political consequences of the protectionist agricultural tariffs for Bismarck personally were more nuanced. They certainly marked the beginning of a consolidation of his position after the crisis of the depression. The parliamentary liberal parties were divided through the passage of the tariff bill and no longer represented a threat. Having defeated the more progressive wing of the party, Bismarck was able to dismiss many liberals from his cabinet, which he stacked with conservatives, giving him an even freer hand in policy-making (Steinberg, 2011, 384-387). He became, in the words of the famous author Theodor Fontane, "a despot".¹⁶ He retained his position as Chancellor until the death of the Kaiser and his replacement by Wilhelm II in 1890. However, the nature of this position changed. As Wehler (1969, 105-111) argues, Bismarck's concessions to large industrialists by including them in the tariff marked the beginning of pluralist politics in Germany and the need for government policy to respond to demands from interest groups rather than simply respect the wishes of the sovereign. Balancing the competing demands of powerful industrialists and the growing working class was the main task of the rest of his term as Chancellor, one which he approached by seeking colonial export markets for industrial goods while implementing social welfare reform to placate restive urban workers.

¹⁶ Cited in Steinberg (2011, 398).

4.7 Conclusion

In this chapter, I traced the political and socio-economic roots of Bismarck's shift to protection for German agriculture in 1879. I have shown that the policy shift was caused by the bias within the Imperial German political system towards Prussian grain-growers, which was so overwhelmingly that for the Chancellor to oppose their interests would have come close to an act of political suicide. The unequal distribution of land in the Prussian countryside gave the Junker aristocracy both the foundation of their traditionally powerful political position, as well as an inordinate number of mandates in the Reichstag. This rural bias reached even further, to the degree that all branches of the government were dominated by the Junkers, from the Kaiser through the Chancellor to the Cabinet and Prussian military and bureaucracy.

In short, Imperial Germany remains the canonical example of a rural-biased authoritarian regime, in which government policy intervention in the interests of farmers was an expedient measure with which to placate powerful interests and maintain political stability. As I have shown in Chapters 2 and 3, the interactions between political threats and agricultural policies illustrated by this case are important for explaining the politics of agricultural policy globally in the contemporary era. Agricultural policy under authoritarian regimes does not only serve the purposes of placating the food consuming masses and industrialists with interests in low wages, as it could be said that it did in England in the post-Corn Law era. It also (and perhaps even primarily) serves as a tool of power sharing which addresses the threats of elites and powerful agricultural interests, as I have shown that it did in Imperial Germany. Including this—producer and elite—side of the story helps explain agricultural policy outcomes (as in Chapter 2), but more importantly, it is a novel contribution to the literature on the determinants of authoritarian regime stability. To further illustrate the importance of agricultural policy in the perpetuation of rural-biased authoritarian political systems, in Chapter 5 I show how elites in 1970s Malaysia used intervention in agricultural markets as a mechanism to placate restive urban interests which threatened to bring down the Malaysian regime and impose a single-party dictatorship in the country. In this way, I show how by *learning from* the historical Imperial German case allows me to generate new theory explaining continued authoritarianism in a very different geographic and temporal context.

Chapter 5

Agricultural Policy and Authoritarian Regime Durability in Malaysia, 1969—1980

5.1 Introduction

In Chapter 4, I showed how a protectionist trade regime which increased the incomes of Prussian agricultural elites was a key part of the Imperial German government's survival strategy in the 1870s and 1880s. By following their policy preferences, Chancellor Bismarck was able to secure the political support of the powerful landed aristocracy, securing his position in power and the stability of the regime. In this chapter, I examine the role of agricultural policy in the perpetuation of an authoritarian government within a very different geographic and temporal context. I will show how, when confronted with a political crisis and a shift in the relative power of urban and rural elites, the Malaysian government moved towards an interventionist agricultural and rural development policy which privileged farmers over urban food producers. Through this policy shift, the leadership of the ruling party addressed restive rural elites who threatened the stability of the Malaysian regime by demanding a move to a single-party dictatorship. Thus heading off these demands through interventionist policies which benefited the rural interests which were ascendant within the party, a disintegration of the ruling coalition was prevented and regime stability was restored.

Malaysia lies in South-East Asia, bordering Thailand in the north of peninsular Malaysia, Indonesia in the south across the straits of Melacca and on the island of Borneo, and the Philippines in the west across the Sulu and South China Seas. It is the direct successor state of several former Malay and Bornean Sultanates, as well as the British colonies of Melacca and Penang. Gaining independence in 1957, Malaysia grew through the 1960s as it incorporated the Bornean states of Sabah and Sarawak into the Federation while Singapore was expelled.

Economic development in Malaysia has been relatively swift for the entirety of its modern history, but starkly divided along ethnic lines. The dualistic colonial Malaysian economy consisted of foreign interests in tin mining, plantation rubber and palm oil production, alongside an indigenous traditional sector comprising small-scale rice and rubber cultivation, and fishing. Thus a pattern of European and immigrant Chinese involvement in urban high-output sectors, and Malay activity in low-output agriculture, characterized the country at independence (Drabble, 2000). As we will see, addressing grievances around these ethnic disparities was a key goal for the Malay-dominated government after 1969.

Malaysia has a relatively long history of elections and organized political parties, although it has been regarded as an authoritarian regime by most political scientists until very recently because of collusion among the major political parties which has prevented the opposition from taking power (Przeworski et al., 2000; Marshall and Cole, 2011). Elections have been held in the country, first at the municipal level then at state and national level, since the early 1950s. Each of the major political parties in Malaysia was established along ethnic or religious lines, as shown in Table 5.1, and these cleavages have only begun to weaken very recently (Pepinsky, 2009). Elections in Malaysia were dominated, at least until 2008, by a shifting inter-ethnic coalition of parties known first as the Alliance, later as the *Barisan Nasional* (National Front), which has formed every government since independence. The dominant party within Alliance/BN is the United Malay National Organization (UMNO), though its hegemony has not gone continually unchallenged. As I will show below, power shifts within the ruling coalition have had important consequences for regime stability and demanded decisive policy responses by the government in the interests of political survival. Due to Malaysia's relatively high level of development and experience of parliamentary

Party	Ethnicity/Religion	Rural/Urban	Alliance/BN
United Malays National	Malay/Islamic	Rural	1952-present
Organization (UMNO)			
Malaysian Chinese	Chinese	Urban	1952-present
Association (MCA)			
Malaysian Indian	Indian	Urban	1957-present
Congress (MIC)			
Malaysian People's	Chinese	Urban	1972-present
Movement (Gerakan)			
Pan-Malaysian Islamic	Malay/Islamic	Rural	1973 - 1978
Party (PAS)			
Democratic Action Party	Chinese	Urban	
(DAP)			

Table 5.1: Main Malaysian Political Parties, 1960s-1980s

Source: Means (1976, 1991).

government, its stable single-party rule under UMNO and lack of democratic reform have proved puzzling for political scientists. In this chapter, I discuss previous explanations of continued authoritarianism in Malaysia and show that they have over-emphasized the stability of the ruling coalition in the country and paid little attention to the role played by agricultural policy in managing the, at times extremely volatile, intra-elite politics in the country.

I examine a critical juncture in Malaysia's political history: the 1969 election, which resulted in surprise losses for the government, and the ensuing mass unrest in Kuala Lumpur. I link these important events in mass politics to a shift in intra-elite politics which significantly strengthened rural interests within the ruling coalition.¹ I show how the position of the Malaysian Chinese Association (MCA) was significantly weakened in the wake of the elections and urban riots, and the position of UMNO and its rural Malay chauvinist wing was strengthened. To locate these developments within the Stigler-Peltzman framework laid out in Chapter 1, the events of 1969 moved the Malaysian regime's political support function away from a moderate slope, at which both urban food consumers and rural food

 $^{^1}$ The critical juncture I analyze corresponds to a shift in 'regime' as discussed by Case (1996a).

producers' interests were taken into account as policy sought to balance their political threats. After 1969, the regime's political support function became flatter as rural UMNO elites became more powerful vis-a-vis their urban MCA rivals, in contrast to the German case explored in Chapter 4, where international grain price fluctuations shifted rural elites' policy preferences while their threat to the regime remained constant. I explain how a pro-rural agricultural policy reform, which increased the incomes of Malay rice farmers at the expense of urban food consumers, played a vital role in placating restive Malay elites within the ruling coalition and heading off their demands for a complete reorganization of the political system as a single-party dictatorship under UMNO. Thus, referring to Chapter 1, the power shift within the ruling coalition led to a more producer-friendly policy as at S_3 in Section 1.3, which in turn ensured regime stability. In this way, agricultural policy was an important tool promoting regime stability in 1970s Malaysia which has been overlooked by previous scholars of authoritarianism in the country.

5.2 Authoritarianism and Agricultural Protection in Malaysia

Malaysia is not a fully-fledged democracy, but belongs to the relatively large set of contemporary regimes that share many institutional features with democracies without allowing for full electoral accountability. Thus an area specialist like William Case describes the country as a semi-democracy (Case, 1993), a pseudo-democracy (Case, 2004), and a singleparty dominant regime (Case, 1996), while Gordon Means (1991) calls Malaysia an elite accommodation system. Referring to Dahl's (1971) dimensions of inclusiveness and contestation, Malaysia is a partly closed political system, where mass mobilization around particularly contentious issues is prevented, and democratic institutions play only a limited role in determining policy and leadership despite universal suffrage (Means, 1991, 2-4). Contestation is restricted, not to the extent of closed single-party systems but more than in competitive multi-party systems. UMNO has occupied the dominant position within the Malaysian ruling coalition since independence by achieving a difficult balance between promoting Malay communal interests and simultaneously presenting itself as the guarantor of racial harmony within the country (Case, 1996). Malaysia is, for modernization theorists, an anomalously long-lived authoritarian regime. In their study, Przeworski et al. (2000) consider Malaysia a dictatorship from independence until 1990 due to its lack of alternation of the ruling party, but calculate that the probability of Malaysia remaining autocratic from 1988-1990 was only 0.31 using an economic model of democratization. This places Malaysia alongside Singapore and Mexico as one of the most anomalous examples of continued authoritarian rule in the world, given its high level of development. Despite its nominally democratic parliamentary political system, due to the stable coalition under UMNO since independence Malaysia is effectively a one-party regime more similar to Mexico under the PRI than to a true multiparty democracy (Case, 1996; Magaloni, 2006).

Malaysia's challenge to modernization theory has been well noticed and explored by political scientists, who have explained its lack of democratic reform by highlighting the institutional capacity of the Malaysian state, and the ruling party's ability to prevent intra-elite conflict. Levitsky and Way (2010, 318-328) cite Malaysia as an example of a stable, competitive authoritarian regime from 1990-2008, which did not fully democratize due to the organizational and coercive power of UMNO and the state, and the relative lack of economic and social linkages to the West, which created a "highly uneven playing field" skewed against the opposition. Brownlee's similar explanation of the lack of democratic reform in Malaysia also centers on the role of political parties that "dominate national affairs and regulate elite conflict" (Brownlee, 2007, 2). After an initial period of instability and regime formation in the pre-independence period, UMNO was able to prevent intra-elite splits and maintain its hegemonic position in the country until the present day.² Slater (2010) sees the basis for enduring authoritarian rule in Malaysia in a broad set of institutions—of the state, military and party—which promote elite-level cohesion and thus regime durability.³ The driver behind this successful 'protection pact' among elites is to be found in episodes of contentious politics: the pre-independence strife of the 1950s, and the ethnic violence of the late 1960s, which impressed on UMNO elites the need for a strong state which could contain and repress domestic political instability and opposition.

Intra-elite stability is crucial in any explanation of authoritarian durability, and political parties can serve as important tools in preventing elite splits which lead to regime collapse

 $^{^{2}}$ See, in particular, pages 56-64, 93-100 and 137-145 in Brownlee (2007).

 $^{^3}$ See, in particular, pages 3-23, 74-93 and 146-163 of Slater (2010).

(Geddes, 1999; Magaloni, 2008). Therefore, the role of UMNO, the Alliance and Barisan Nasional in Malaysia unsurprisingly plays a large role in these explanations of continued authoritarianism in Malaysia. However, all of these studies over-emphasize the role which mass politics plays in autocracies, and over-state the level of elite cohesion which predominated in UMNO and the ruling coalition after 1957. Levitsky and Way (2010, 54) are almost exclusively concerned with mass threats to authoritarian regimes, as they focus on the ways in which authoritarian governments can divide oppositions, repress protest and steal elections. Intra-elite splits do not play a large role in this story.⁴ Brownlee (2007) paints a homogeneously stable picture of intra-elite politics within UMNO, highlighting party elites' ability to co-opt opposition politicians and manage conflicts within the organization. Slater (2010, 14) sees Malaysian elites being "driven by force of contentious events to perceive lower-class movements as their shared enemy, and their fellow elites as their indispensable coalitional friends", with the cohesion thus developed driving the development of a broad set of institutions conducive to regime durability.

These explanations of regime durability in Malaysia therefore seem to run directly counter to the more recent findings of Svolik (2009, 2012), which demonstrate that mass threats are relatively unlikely to bring down authoritarian regimes, and intra-elite conflicts pose an acute problem to regime stability that overshadows that of mass uprisings. It is remarkable that Levitsky and Way locate the causes of continued authoritarianism in Malaysia in the regime's capacity to contain mass threats through coercion, when these mass threats were always relatively mild in any case: The one episode of violent mass unrest in the country in 1969 was easily contained by the security apparatus, as I will discuss in more detail in Section 5.5. Brownlee, for his party, rightly points out that UMNO effectively managed intra-party conflicts and co-opted threatening opposition groups, but does not discuss the origins of opposition within and outside the party and how responses from UMNO addressed these specific grievances. It is also puzzling that Slater's account emphasizes a high level of elite cohesion caused by a communist insurgency in the immediate post-war period and a single urban unrest event in 1969. Given the tendency of intra-elite politics under authoritarianism to become highly volatile (Svolik, 2009), and the incentives for

 $^{^4}$ I do not go into their international dimensions of democratization here, such as the diffusion of democratic ideas or western governments' leverage over authoritarian regimes. These explanations are not directly comparable to the domestic politics approach followed by myself, Brownlee and Slater.

defection from collective action with rivals (Olson, 1965), there are strong reasons to doubt that the Malaysian ruling coalition should rule in peaceful cooperation in response to mass threats which are relatively mild and lie decades in the past.

In short, I find the picture of relative harmony in Malaysian intra-elite politics put forward by these authors problematic. In what follows, I will present a different picture of Malaysian politics, which attaches less importance to mass politics and emphasizes the divisions among the members of the ruling coalition and the balance of power among them.⁵ As we will see, mass threats to the Malaysian regime have been mild and well-contained since independence. By contrast, and casting some doubt over other accounts, intra-elite politics have not been charcterized by stability and cooperation, but by hard-nosed power-sharing between parties and intra-party factions. The dominant parties of the 1960s and 1970s, UMNO and MCA, never integrated into a multiracial non-communal party, but only an inter-ethnic electoral coalition. Their leaders have never had harmonious views on the direction in which the country should be pointed, which is unsurprising given the divergent ethnic and economic interests which they represent. Instead, they have reached successive bargains over core policies, such as those around agriculture and rural development, through negotiations based on their relative power within the ruling coalition. This power has been loosely based on their support in the population at large, and I will show how mass politics and elite politics interacted at a critical juncture in Malaysian history to affect powersharing and policy outcomes. Politics within UMNO have also been less than harmonious in the history of Malaysia. Differences between hard-line Malay communal activists and more moderate factions have been significant, and have had a considerable impact on policy through intra-party power struggles.

I draw attention to intra-elite politics in order to expose the role which economic policy and rent-seeking has to play in explaining the relative stability of the Malaysian regime. Specifically, I will explain how the agricultural policy regime has served UMNO politicians as a tool of authoritarian power-sharing which promoted elite cohesion by allowing politicians to distribute rents to their constituencies, buy off rivals and create allies which cemented their positions in power. They have been able to do so through successive rounds of bargaining with the urban-based MCA in which the UMNO has successively increased

 $^{^5}$ This approach is closest to that of Case's (1996a) account of Malaysian politics which focuses on 'elites and regimes'.

its power vis-a-vis its Chinese counterpart, until it achieved political predominance and a free hand in economic policy in 1971. Thus, agricultural policy in Malaysia has been a function of intra-elite bargaining and power-sharing, and had a significant effect on regime stability.

The link between economic policy, the distribution of rents, and politics in Malaysia has been highlighted by local authors. Gomez and Jomo K.S. (1999) argue that the Malaysian government's pervasive interventions in the national economy since the early 1970s have provided irresistible opportunities for widespread rent-seeking. Members of the national political elite, primarily leaders from the UMNO hierarchy, have abused their access to government to create and capture rents for themselves and their political supporters. For example, privatization of state assets and services has tended to benefit UMNO politicians, their families and close friends through access to share distributions and lucrative government contracts (ibid., 91-100). Involvement in politics, or closely associating oneself with UMNO politicians, has also been a path to obtain business opportunities on the local level, for example via the procurement of government licenses.

However, such studies do not take the further step to directly assess the consequences of rent-seeking and political patronage for the durability of the Malaysian regime and the lack of democratization in the country. To be sure, the authoritarian nature and consequences of the close links between business and politics in the country are implicit in this work, but not explicitly drawn out.

In addition, these studies pay relatively little attention to agricultural policy, and examine primarily the complex inter-relationships between the ruling parties, large corporations and state-owned enterprises which have grown up under the New Economic Policy (NEP) since the early 1970s. These developments are extremely important in explaining Malaysian political economy, but they do not engage the importance of the NEP for rural development and structural transformation in the country: As Lee and Heng (2000, 208) notes, "it was the introduction of the New Economic Policy that brought about a fundamental transformation to the Malaysian polity." The effects of the NEP in this regard are in fact just as politically important as the later development of crony capitalism in Malaysia. In this chapter, I will present evidence that the adoption of the NEP in 1971 had its roots in political conflict between rural food producers and urban food consumers. In order to placate the powerful rural Malay constituency within UMNO after its surprising desertion in the 1969 election, the government implemented the NEP as a program to alleviate this group's relative poverty in the country. Therefore, agricultural policy was important both for regime durability in Malaysia but also for the long-term development trajectory and the evolution of the national political economy, including the corruption and rent-seeking which followed in its wake.

5.3 Setting the Stage: Political Threats to the Malaysian Regime

Malaysian history from 1945 to 1969 reads as a litany of serious challenges to the creation of a stable national government. Indeed, I will argue that the political system was in a state of flux until 1971, despite a pattern of power-sharing among Malay and Chinese political elites which exhibited some stability. The UMNO-MCA 'Bargain' around contentious policies was fragile and eventually broken after the election and unrest of 1969. The political equilibrium which emerged in 1971, and which continued at least until 2008, was in fact UMNO hegemony, cemented by a pro-farmer agricultural policy which appeased Malay chauvinists within the party and benefited its core constituency. How a shift in the balance of power within the Alliance led to a shift in agricultural policies and durable UMNO rule is the topic of this case study, but requires first a brief discussion of post-war developments in the country.

5.3.1 The Foundation of Malaysia, the 'Bargain', the 1969 Crisis and UMNO Hegemony

British Malaya, consisting of the Straits Settlements plus the nine Malay States, was occupied by Japanese forces during the Second World War.⁶ This experience involved hardships for the entire Malayan population as economic infrastructure was destroyed in the fighting against the British, leading to food shortages and outbreaks of disease (Milne and Mauzy,

⁶ At this time, the Straits Settlements of Singapore, Melakka and Penang were colonies directly ruled by the British. All other Malay states retained nominal sovereignty under their traditional Rulers (Sultans) but had protection agreements with the British government (Means, 1976, 42-44).

1978, 21-22). However, targeted persecution of Chinese by the occupying forces, for example their mass execution in Singapore shortly after its capitulation, led to a high degree of political radicalization among this ethnic group, and the growth of the Chinese Communist movement (Means, 1976, 44-48, 68-70).

This development was to be of significant importance after 1945, when re-imposition of British rule was far from a smooth process. Most Malayans had expectations of some sort of transition to independent and democratic self-rule, yet it was unclear exactly how this transition would play out and what its ultimate goal would be. An abortive attempt by the British in 1946 to establish a Malayan Union of all the Malay states and Straits Settlements minus Singapore provoked an uproar of opposition among Malays, who had not been consulted in the drafting of the legislation and fiercely opposed the move to direct rule and granting of citizenship to non-Malays which the Union entailed (Milne and Mauzy, 1978, 26-29). Retreating, the British replaced the Union with a Federation Agreement which provided for indirect rule of Malaya by a British High Commissioner, in consultation with the Malay Rulers and a Legislative Council (ibid., 29-30).

In the midst of these constitutional developments, two important events threatened the stability of the political system in an immediate fashion. Firstly, the outbreak of a Communist terrorist insurgency or 'emergency' attempted to violently overthrow the government, lasted until around 1955 and cost 11,000 Malayan lives (ibid., 31-32). The Malayan Communist Party, which directly after the war had been the predominant political organization in the country, was by 1948 on the back foot due to government restrictions on labor unions, its exclusion from the constitution-drafting process and the growth of competing political movements such as UMNO (Means, 1976, 68-97). Partly inspired by developments in Moscow, Indonesia and Vietnam, Malaysian Communists began a revolutionary terrorist campaign, which went beyond strikes and included violent attacks on villages, mines and rubber plantations. The 'emergency' was eventually resolved via a successful counter-insurgency strategy led by British military forces (Hack, 2009).

The second crucial development in late 1940s Malaya was the emergence of a mass Malay political party, UMNO, which was to dominate politics in the country until the present day. The British proposals for the Malayan Union were the direct catalyst for the founding of UMNO by Onn bin Jaafar, who organized the Pan-Malayan Congress in Kuala Lumpur in 1946 at which the formation of UMNO and its opposition to the Union were decided. The party built upon existing Malay elites and social structures to quickly form a cohesive and powerful political force. English-educated aristocrats and civil servants, village headmen, school teachers and religious teachers provided leadership at both the national and grass-roots level. The threat of organized political opposition to its proposals forced the British retreat from its plans for the Malayan Union and established UMNO as the predominant political force in the country (Mauzy, 1983, 6-9).

The formation of the MCA, on the other hand, was more an organic progression than the true water-shed of the foundation of UMNO, given the history of Chinese political organizations in Malaya dating back to the nineteenth century (Heng, 1988, 9-36). Conservative Chinese were organized into the MCA in 1949, in an attempt to consolidate these traditional elites' positions in opposition to the Communist insurgency. The MCA incorporated leaders of the various Chinese chambers of commerce, ethnic and clan associations into a truly Malayan party for the first time, with the goal of defending Chinese cultural values and capitalist interests in the face of the political uncertainty of the time. With national leadership drawing on established economic and cultural institutions, and local leaders consisting of prominent business owners and community headmen, the MCA was able to quickly become an effective political party and social organization (ibid., 54-97).

The years between the re-establishment of British rule in Malay in 1946 and the declaration of independence in 1957 brought a degree of political stability, as the Communist emergency had been brought under control and the first local and federal elections were dominated by the UMNO-MCA Alliance.⁷ The Alliance had made demands for Malayan independence, or *Merdeka*, the core of its electoral platform in 1955 and made good on its promises to the electorate by spearheading the push for a Malayan delegation to visit London to discuss independence in early 1956. Alliance delegates and representatives of the Malay Rulers conducted the relatively uncontentious talks, and Alliance politicians had a decisive influence on the report drafted by the Reid Constitutional Commission in 1957. The Federal Council unanimously approved the draft Constitution on 15 August and Malayan independence was proclaimed on 31 August, ending over 170 years of British rule in Malaya and the Straits Settlements (Means, 1976, 170-192).

 $^{^{7}}$ For more detail on the emergence of this electoral collaboration, and specifics on the *Merdeka* constitution, see Section 5.3.2 below.

If the 1950s were a period of intial consolidation of the Malayan political system, the 1960s brought renewed turmoil as neighboring Indonesia responded aggressively to the formation of the Federation of Malaysia, and UMNO elites dealt with the challenge of a powerful Chinese political movement in Singapore by expelling the island state from the Federation. In 1963, an enlarged Federation of Malaysia was established, which included Singapore and the Borneo states of Sabah and Sarawak. Refusing to recognize Malaya's efforts to integrate the Borneo states into its Federation, Indonesia began a "crush Malaysia" campaign in which Indonesian-armed guerillas and regular Indonesian troops engaged Malaysian, British and Commonwealth forces in Borneo. The Malaysia-Indonesia *Konfrontasi* lasted until it was swiftly discontinued under the new Suharto regime in 1966 (Mackie, 1974).

Apart from this external threat, disruptions to the balance of power between the Malay UMNO and Chinese political parties led to the expulsion of Singapore from the Federation after only two years of membership. Following Singapore's accession to the Malay Federation it became clear that the large Chinese majority in the city (75% were Chinese versus 37% in peninsular Malaya) and their support for Lee Kuan's Yew's People's Action Party posed a significant threat to the Malays' position in the country. Rejecting Lee's calls for a non-communal "Malaysian Malaysia", as opposed to UMNO's goal of racial harmony under Malay political hegemony, Prime Minister Rahman ejected Singapore from the Federation by constitutional amendment on August 9, 1965 (Means, 1976, 333-359).

This event was an extreme example of the sorts of elite power-sharing difficulties which were to plague the country until the early 1970s and which were finally resolved with – among other things – an interventionist agricultural policy that eased elite and mass Malay concerns about unequal development and the economic predominance of the Chinese population. Disputes among the Alliance member parties around communal issues such as citizenship for non-Malays and the language of school instruction had been simmering during the entire course of the transition from British rule to independence. They had been temporarily resolved through "the Bargain", or the basic deal struck around the new Malaysian constitution under which Malays were to retain political power in an Islamic state with Malay as the official language, in exchange for granting citizenship to non-Malays and the promise of unhindered economic activity in a laissez-faire policy environment (Mauzy, 1983, 20-22). In essence, this bargain formalized the status quo, reflecting the balance of power between the UMNO and MCA, and from 1957 until the rise of Lee's PAP in the mid-1960s it went unchallenged. Rahman's decision to expel Singapore from the Federation can be seen as an attempt to restore the political system to its previous equilibrium embodied by the Bargain (Parmer, 1966).

What is important to note about the Bargain and the pre-1969 political equilibrium between UMNO and the MCA is that it was one based on a relatively equal balance of power between the two party elites within the Alliance. The MCA had a real voice in policy decisions and was able to effectively block UMNO proposals which ran counter to Chinese interests. For example, in 1949 the British set up the Communities Liason Committee to encourage local elites' cooperation with their post-war constitutional initiatives. Within this committee, MCA and UMNO representatives reached a bargain around Malay special rights and citizenship for non-Malays which was a relatively equal compromise. Malay politicians were "unaggressive and low-key" in asserting their interest in pro-Malay economic policies and happy to reach a limited bargain in which MCA assurances on Malays' special position as the original people of Malaya were traded for a liberalization of citizenship requirements for non-Malays (Heng, 1988, 147-156). In the Alliance's 1955 election manifesto, responsibility for drafting economic and finance policy, as well as ethnically charged education policy, was delegated to MCA representatives, whose papers "contained clear-cut policies which were beneficial to Chinese interests" (ibid., 203).

In the negotiations around the independence Constitution and the resulting inter-party Bargain, the MCA was undoubtably the junior partner in the Alliance. However, it was able to block UMNO encroachments on what Chinese saw as their key interests, most importantly citizenship, Chinese-language education, and a commitment to non-interventionist economic policies. The reasons for the relatively equal balance of power between Malay and non-Malay politicians before 1969 did not lie directly in the demographic structure of Malaya. Excluding Singapore, Malays constituted around half the population of the country and due to the restrictive citizenship regulations of the time, they made up a large majority of the electorate (Means, 1976, 12). However, the hand of the MCA was strengthened for several other reasons related to intra-elite politics. Firstly, UMNO was determined to demonstrate to the British government that an independent Malayan government would not involve the domination of other ethnic groups by Malays, and used a collaboration with the MCA to this end. Second, the MCA was a wealthy and efficient party and able to contribute considerably to the Alliance electoral campaign in financial and organizational terms. Third, the generation of UMNO leaders of the day were primarily from aristocratic and bureaucratic backgrounds, and were happy to defer to Chinese experts in the field of economic policy. Finally, the first generation of Malay and Chinese political elites had shared experiences such as English-language education, service in the British or Japanese civil service, and membership in the various committees set up by the British on the path to independence which promoted a sense of common purpose and cooperation between the groups (Heng, 1988).

The initiation of Singapore into the Federation of Malaysia, though perhaps judged expedient in the face of the threats from the Communist insurgency and Indonesian aggression, introduced a large Chinese population and Lee Kuan Yew's PAP into the Malay political system and threatened its delicate balance. Rahman's tactic of expelling Singapore, however, was to prove only a provisional restoration of equilibrium until 1969, when the Malaysian regime was faced with "a crisis that ... threatened the survival of its principal political institutions and the maintenance of civil order within society" (Means, 1991, 1). The 1969 federal election was a defeat for the Alliance, though they maintained an absolute majority of seats in the House of Representatives, as is shown in Table 5.2. Their share of the popular vote collapsed by 15% as competitor Malay and Chinese parties, the PAS and DAP respectively, made significant inroads into support for UMNO and the MCA (see Section 5.3.4). In the aftermath of the election, violence erupted in Kuala Lumpur as first Chinese opposition supporters, then Malay UMNO followers staged street demonstrations which quickly escalated (Goh 1971). After the losses of the MCA in urban electorates in the state of Selangor, of which Kuala Lumpur is the capital, Malays were worried that opposition parties would take over the state government. At least partially provoked by processions on May 11 and 12 which celebrated the opposition successes, counter-demonstrations by Malays on May 13 careened out of control. Chinese residences and businesses in the city were looted and burned, and Chinese retaliated violently. Several hundred were killed and around 6,000 people were made refugees from their destroyed homes (Means, 1991, 6-8). Electorally, the rule of the Alliance was not threatened by their poor result in 1969. However, the political consequences of the election and the events of May 13 were enormous. The migration of voters from the UMNO to the PAS, and the violent of rage of Malay citizens in Kuala Lumpur against their Chinese and Indian countrymen, made Malay discontent with Alliance government patently clear. The inability of the MCA to appeal to Chinese voters, the intensity of the Malay response to DAP success, and the efficacy of the Malay-dominated security forces made the precarious political position of the Chinese in Malaya similarly clear (Heng, 1988, 261). A national emergency was declared, under which the constitution and parliament were suspended and the 1969 elections for the Bornean states of Sabah and Sarawak were postponed indefinitely. The government of the country was delegated to a National Operations Council, headed by the Deputy Prime Minister, Tun Razak. During the period of emergency rule, a new political equilibrium emerged in Malaysia, in which UMNO was the absolute political hegemon, and the MCA was relegated to a minor supporting role. As we will see, the implications for regime stability and agricultural policy—for both were inextricably intertwined—were profound.

5.3.2 The Institutional Setting: Coalition Government in a Westminster System Eliminates Electoral Accountabilit and Makes Intra-Elite Politics Decisive for Policy

The constitution of the Federation of Malaysia is, by appearances as in Figure 5.1, closely modeled on the Westminster system as practised in other ex-British colonies, but in fact provides very few checks on the power of Cabinet and the Prime Minister, making this very small elite group decisive for policy-making. Because of the stable coalition governments in Malaysia under the Alliance and BN, the country is effectively a one-party regime, making intra-coalition politics extremely important for understanding policy and the stability of authoritarian rule in the country.

Malaysia is a constitutional monarchy. A Council of Rulers, comprised of the hereditary Sultans of the Malay states, elects a Supreme Head of the Federation on a rotation basis for a period of five years. The Supreme Head, or *Yang di-Pertuan Agong*, is the constitutional and ceremonial Head of State but lacks any real power, occupying a position similar to that of the Governor-General of New Zealand. The power of the Council of Rulers and Supreme Head extends in effect only to a veto power over matters directly affecting their constitutional position, to their capacity to elect the Supreme Head, and the Supreme Head's power to dissolve parliament.

Following the British tradition, the lower House of Parliament carries the primary legislative authority in Malaysia. The Senate, which is mostly appointed by the Supreme Head and partly elected from State Legislative Assemblies, can delay legislation passed by the House for up to one year, and by only twenty-one days in the case of supply or "money Bills". Members of the House, or *Dewan Rakyat*, are elected in single-member constituencies for five-year terms by all Malaysian citizens at least 21 years of age. These elections are widely regarded to be run fairly (Case, 1996, 118). Bills are passed in the House by simple majority.

Figure 5.1: The Malaysian Regime: Important Political Posts and People, 1969-1978

Legislature	ang Senate, Dewan Negara	 26 Members elected by State Legislative Assemblies 32 Members appointed by the Supreme Head until 1978, thereafter 40 plus 4 for Federal Territories Three year terms, no more than two consecutively Power to delay bills by one year, or 21 days in the case of supply ("money Bills") Two-thirds majority needed for constitutional amendments With Alliance/BN control of State legislatures, largely a "rubber stamp" for bills originating in the lower house 	 <i>House of Represenatives, Dewan Rakyat</i> Elected by general election of all resident citizens 21 and over k, Single member constituencies 144 Members after 1965, 154 Members 1973 - 1984 Maximum of five vear periods 	 Bills passed by simple majority Two-thirds majority needed for constitutional amendments Legislative districts determined by Electoral Commission (EC) every eight years; EC appointed by the Supreme Head 		e of		
Executive	Supreme Head of the Malaysian Federation, Yang di-Pertuan Agong	 Appointed for five-year term by, and from, Conference of Rulers of the Malay States Appoints a Member of the Hous of Representatives as Prime Minister (PM) and, on the advice of the PM, Cabinet Consents to dissolution of Parliament Gives assent to bills originating in the legislature Can deliberate, along with the Conference of Rulers and PM, on questions of national policy Is symbolic Supreme Commander of the Armed Forces 	Council of Rulers of the Malay States, Majlis Raja-Raja Constituent States: Johor, Kedah, Kelantan, Malacca, Negeri Sembilan, Pahang, Penang, Perak, Perlis, Sabah, Sarawak, Selangor, Terengganu. Federal Territories of Kuala Lumpur, Putrajaya and Labuan with limited representation.	 Elects the Supreme Head of the Federation Veto power over laws affecting the privileges, position, honors or dignities of the Rulers Can deliberate on matters of national policy 	Prime Minister, Perdana Menteri Tunku Abdul Rahman, Tun Abdul Razak	 Appointed by Supreme Head from Members of the House of Representatives Must command a majority in the House Suggests Ministers for appointment to Cabinet 	Cabinet, Jemah Menteri	 Collectively drafts and proposes legislation to Parliament Determines policies and advises Supreme Head Membership varies and tends to increase with number of parties included in Alliance/BN government

Sources: Malaysia (2010), Means (1976).

Without a directly elected President or an effective veto for the Senate, power is concentrated in the *Dewan Rakyat* and, as in any Westminster system, with the Prime Minister and Cabinet (Lijphart, 1999, 9-30). Where Malaysia diverges from the majoritarian model, however, is in its stable coalition governments under the Alliance and BN and lack of a second opposition party. Under a stable coalition government dominated by UMNO and with a sizable majority in the House, the Malaysian political system effectively devolves into a one-party regime more similar to Mexico under the PRI than to British two-party democracy (Case, 1996; Magaloni, 2006).

Cooperation between the dominant communal parties, UMNO and the MCA, can be traced back to the first Kuala Lumpur municipal elections in January 1952, where they agreed not to contest in the same districts in order to defeat the Independence of Malaya Party which had been formed under the former UMNO leader and founder, Dato Onn. The strategy was successful, with nine of the twelve Municipal Council seats going to UMNO and the MCA (Means, 1976, 126-133). In a pattern which has continued under the Alliance and *Barisan Nasional* to the present day, UMNO candidates contested in Malay-dominated districts while the MCA fielded candidates in predominantly Chinese districts. This approach advocates "harmonious" coexistence of largely separate communal political parties, rather than non-communal politics as advocated by Onn and later Lee Kuan-Yew's People's Action Party (ibid., 134, 347).

Through this cooperation, the UMNO-MCA Alliance had established itself as the dominant political force in the country even before independence, winning over eighty percent of all votes cast in the first Federal elections and thus holding 51 out of 52 seats in the Legislative Council which ratified the new constitution in 1957 (ibid., 153-167). After independence, the Alliance continued its domination of the House and thus its hegemonic political position in Malaysia, as is shown by the Federal election results presented in Table 5.2. Comfortably winning the inaugural Federal elections in 1957, the Alliance and its successor the *Barisan Nasional* enjoyed the two-thirds majority required to make constitutional amendments continuously through the 1960s and 1970s, with the sole exception being the period following the contentious 1969 election.

Controlling the House, Alliance/BN controls policy-making in Malaysia, and thus intraelite politics within this coalition have traditionally been more politically salient than the

	1964	1969	1974	1978
	Seats (% Votes)	Seats (% Votes)	Seats (% Votes)	Seats (% Votes)
Alliance	89~(59%)	66~(45%)		
(Periakatan)				
Barisan Nasional			135~(61%)	130~(57%)
(BN)				
Persatuan Islam	9 (15%)	12 (21%)		5 (16%)
Sa- $Malaya$ (PAS)				
Democratic Action		13~(12%)	9~(18%)	16 (19%)
Party (DAP)				
Other Parties	8~(36%)	45 (18%)	10 (21%)	1 (4%)
Independents		1 (2%)		2 (5%)
Total	104	144	154	154

Table 5.2: Results of Elections to House of Representatives, Malaysia, 1964-1978

Source: NSTP Research and Information Services (1999). 1969 results are for Peninsular Malaysia only.

results of general elections.⁸ To put this in Svolik's (2012) terms, the problem of political 'control' of the masses was for decades effectively solved through the collusion of the major communal parties while their support bases remained intact and contentious movements were effectively suppressed. Politics in Malaysia centers on intra-elite 'power-sharing'.

The relative unimportance of mass politics can, aside from the collusion of the ruling parties, also be attributed to the highly malapportioned electoral system. Although proportional representation was discussed during the negotiations over the constitution for independent Malaya, it was rejected due to its perceived complexity and at the insistence of the UMNO and MCA, who were aware of the advantages which single-member districts would give them at the expense of smaller parties. The British also favored a majoritarian system, as it fit their goal of ensuring that the Malay population retain political power in the new nation (Lim, 2002, 104). Although the constitution initially provided for legislative districts of a similar population, and this rule was followed in the initial distribution of districts engineered by the outgoing British administration, in 1962 the Alliance government amended the constitution to ensure its control of apportionment in the future.

⁸ Thus Case (1996, 121) notes that due to its dominance within the Alliance/BN, the UMNO party elections are regarded as Malaysia's 'real' elections. Since the losses of BN at the 2008 and 2013 general elections, the preponderance of elite politics no longer necessarily holds.

Delineation was no longer the responsibility of an independent Electoral Commission, but proposed districts could be amended and implemented by the Prime Minister, and the terms of office for the members of the Commission were thereafter also determined by parliament (ibid., 108-109). Thus, elections in Malaysia have been held using districts which weigh Malay and loyal UMNO areas heavily at the expense of urban areas and those with a strong opposition presence.

The concentration of power with the Prime Minister and Cabinet is also exacerbated by the primacy of the Federal government over the States. Most important policy areas are located with the Federal government, with only a few areas such as land laws and licenses, Muslim and Malay law and custom, state and local government services devolved to the States. However, because the Federation collects the vast majority of taxes in the country and redistributes them to the States by a formula of its own choosing, the Federal government has considerable power over state governments and normally passes legislation which is adopted wholesale by the State Legislatures even in the few policy areas for which they are constitutionally responsible. At any rate, policy conflicts between the State and Federal level were rare in the 1960s and 1970s due to Alliance control of all State Legislatures (Means, 1976, 182-186).⁹

5.3.3 Party Politics: Food Producers, Food Consumers, UMNO and the MCA

When considering the threats which food producers and consumers posed to the Malaysian regime over the course of the 1960s and 1970s, it is important to consider the important role played by the largest political parties in articulating the concerns of the two groups. In contrast to the German case examined in Chapter 4, where food consumers' interests were represented by a splintered liberal and Social Democratic block, in Malaysia both urban food consumers and rural food consumers were well organized in ethnic-based political

⁹ Restrictions on the mandate of the Supreme Court and wide-ranging emergency powers further limit the checks and balances on the parliament and thus Prime Minister. The Supreme Court can only strike down legislation in certain circumstances and not in matters regarding freedom of speech, assembly or association. The freedoms of religion, rights to equal protection under the law and the equal treatment of races laid out under the constitution are qualified by permissable exceptions. And by declaring an emergency, parliament can exercise unlimited powers to limit free speech and personal liberty, and to legislate in matters reserved for the States (Means, 1976, 186-188).

parties. Despite this, MCA and UMNO were by no means equal partners in the Alliance. Food producers, primarily Malay rice-growers, formed a large and powerful political constituency within UMNO, while urban food consumers were predominantly Chinese and relied on the politically weaker (though organizationally stronger) MCA for the defense of their interests within the ruling coalition. As the balance of power within the Alliance/BN shifted towards UMNO, it therefore shifted towards rice farmers and led to policies which favored their interests over those of rice consumers. These policies placated Malay communalists within UMNO as well as the rural Malay electorate, and led to increased stability of the regime.

As noted above in Section 5.3.1, UMNO as a political party built directly upon existing traditional power structures within Malay society, such as the positions of the Sultans and village headmen, to mobilize the Malay population. Voters' existing loyalties to their Sultans and aristocratic elites were utilized for support at the polls, as was the authority and organizational capacity brought to the party by the numerous British-trained civil servants in its ranks. Tun Abdul Razak, the second Prime Minister of Malaysia and former leader of the youth wing of UMNO, serves as an interesting case in point. He came from an aristocratic family in the state of Pahang, and was educated at elite institutions in Malaysia, Singapore and Britain before becoming a civil servant and rising swiftly in the ranks of UMNO. Razak was leader of the youth wing of the party, Minister of National and Rural Development under the first Alliance government, and replaced Tunku Abdul Rahman as Prime Minister after 1969 (Shaw, 1976).

UMNO's base in Malay society gave it close links to the rural population, and rice growers in particular. Because it reached into most villages in peninsular Malaysia, UMNO was a party rooted in the countryside and responsive to the needs of these areas which are generally afforded so little influence in undemocratic political systems (Kuhonta, 2011). Also, the first generation of party leaders had grown up in what was primarily a rural colonial society, and even a member of the Malay elite such Razak spent his early years helping in the paddies and attending a village school with local children from rice farming and fishing families (Shaw, 1976, 12-25). Shamsul (1986, 85-86) notes that, for UMNO leaders "rice cultivation represented the 'true' Malay traditional village life", in contrast to plantation agriculture which was viewed as an alien, capitalist venture imposed on Malaya by European colonialists. The central role played by padi farming in Malay culture, and a perceived necessity for the country to strive for food self-sufficiency, gave rice cultivation a special place in the economic policy considerations of the ruling Malay party.

As James C. Scott (1985) famously describes for the case of a rice farming village in Kedah, north-west Malaysia, the overlap of large rice farmers, the leaders of the local Farmers' Association and prominent UMNO members was so complete that these were essentially the same set of local political elites. In the village studied by Scott, all members of the local farmers' association except one were members of UMNO, and of the richest ten families, six were large landowners (with at least twice the average holding size) and eight were members of UMNO. Therefore, in rice-growing areas the hold of large producers over the party was strong, and such areas were an important power base for the party. In fact, two of the first three Malaysian Prime Ministers, Rahman and Mahathir, were from the rice-bowl state of Kedah studied by Scott (Miller, 1959; Wain, 2009).

Rogers' (1975) study of political leadership in a Malay village in a rubber-growing area in south-west Malaysia also finds that UMNO had considerable reach into rural farming communities outside of rice-growing areas. Local village leadership overlapped with UMNO leadership, as the local party chairman was also the village headman. Party leaders interfaced directly with state and federal agricultural and development agencies such as the Ministry of Rural Development, and were confident of being able to gain policy concessions from these agencies. Although rice farmers were not a large group in this community, landowners and rubber tappers were represented in the ten-person UMNO leadership council alongside teachers and retired civil servants (ibid., 410-412).

To compare the position of rice-growers within UMNO to grain-growing Junkers in Imperial Germany, there are some similarities. The aristocratic background of UMNO leaders and their traditional social standing does resemble that of East Elbian landlords in nineteenth century Germany, who enjoyed similar positions. Also, the dominance within the party of the largest landowners is an interesting parallel to the German case. However, it is clear that the institutional structures of UMNO were far more sophisticated and effective in mobilizing mass support in the countryside than the loose affiliations to the parliamentary *Deutschkonservativepartei* and *Deutsche Reichspartei* factions we saw among Junker politicians in Imperial Germany. These conservative candidates' electoral successes were based

upon voter coercion and electoral fraud (Ziblatt, 2009; Anderson, 2000), while UMNO was a truly modern mass party which mobilized voters by utilizing pre-existing social structures and organizational networks (Samuels and Zucco, 2014).

In the 1960s and 1970s, Malaysian food consumers were predominantly urban Chinese, and politically organized in the MCA, UMNO's junior partner in the Alliance. The membership of the MCA consisted of those who had the greatest interest in lower food prices: lower-income urban residents and rubber-tappers or tin miners who did not produce their own food (Heng, 1988, 73-82).¹⁰ By pushing for citizenship rights for Malayan Chinese under the new Malaysian constitution, the MCA significantly increased the political voice of food consumers, as all citizens were granted the vote (ibid., 148-156).

5.3.4 Socio-Economic Structures: Low Levels of Urbanization Weaken Threat of Food Consumers, Malay Food Producers Prove Threatening to Alliance

The socio-economic structure of Malaysia in the 1960s and 1970s did not facilitate urban unrest which could threaten the stability of the regime and directly force leaders to consider lower food prices as a political necessity to contain mass political discontent. On the contrary, the agrarian nature of the Malaysian economy, and relatively low levels of urbanization, undermined any potential for unrest by food consumers and formed the basis of the rural-biased political system. The rural population, and particularly Malay rice farmers, were a large and well-organized political group (see Section 5.3.3), and were afforded some policy concessions due to this position under the UMNO-MCA 'bargain' of the 1950s and 60s. However, the support of this group for UMNO proved fickle in the late 1960s, as they grew disillusioned with government economic policy and deserted the Alliance in the 1969 elections which rocked the regime to its foundations. In this section, I explain the structural bases of consumer and producer political power in Malaysia, and use original data analysis to show that the core areas of UMNO support—those areas with a very high proportion of Malay population and rice employment—defected to opposition parties in the 1969 election. These aspects of mass politics had a significant effect on agricultural

 $^{^{10}}$ In fact, it was practically impossible for Chinese to become food producers in Malaysia, because padi land was not allowed to be sold to non-Malays.

policy formation and the move to the New Economic Policy in 1971.

It is not my purpose to understate the communal base of mass politics in Malaysia at this time. In fact, ethnicity played a very important role in determining voter behavior and mass politics in Malaysia in the 1960s and 70s, and continues to play this role to the present day (Pepinsky, 2009). My analysis presents new empirical evidence on the ethnic determinants of voting behavior in the crucial 1969 election, but it also shows how economic interests overlapped and interacted with ethnicity to create the important shift away from UMNO and the Alliance at this time. I show that mass support for the ruling coalition has not been stable since independence and am able to isolate those groups who were a real electoral threat to the regime in the late 1960s. Because these groups were defined not only along ethnic but economic lines, it follows that the government's response was also primarily through economic policy. Drawing out these threats and responses is my novel contribution to the literature on stable authoritarian rule in Malaysia.

Malaysia in the 1960s and 1970s was only beginning the swift process of growth and structural transformation which by the 1990s would see it regarded as one of the world's most successful newly-industrialized economies (Drabble 2000). Although economic growth rates averaged over 7% at this time, they occured from a moderately low base as GDP per capita in 1973 was only \$3088, much lower than in Japan (\$7133) but higher than in South Korea (\$1782) (ibid., 183, 113). The economy was still primarily agrarian, and urbanization was low. Data from the 1970 population census presented in Table 5.3 show the relative importance of the agricultural sector in the country at that time, and the lack of a sizeable urban power base for food consumers.¹¹ Agriculture made up more than half of total employment in peninsular Malaysia in 1970, while employment in the industrial and services sectors was relatively low at 5% and 15% of the total, respectively. These figures show that Malaysia was less developed in 1970 than Imperial Germany at the time of its shift to protectionist agricultural policies in 1879: 41% of workers were employed in agriculture in Germany in 1882, 16% in industry and around 20% in services (see Chapter 4). Only 12% of the Malaysian population lived in Kuala Lumpur, the country's largest city (The World Bank, 2012b). The consequences of the agrarian Malaysian economy in the 1960s and 1970s were a lack of a real threat of urban unrest on a scale which could

¹¹ The source for these data are the district population schedules from the 1970 Malaysian population and housing census (Malaysia, 1970). For more information on these data, see Section A.3, Appendix A.

	National Avg. (%)	Legislative Dist. Avg. (%)
Malay Pop.	53	56
Chinese Pop.	35	34
Indian Pop.	10	10
Landholding Gini	43	44
Rice Emp.	16	18
Logging Emp.	1	1
Fishing Emp.	2	1
Rubber Emp.	23	22
Manufacturing Emp.	5	5
Commerce Emp.	10	10
Transport/Comms Emp.	3	3
Services Emp.	15	15

Table 5.3: Socio-Economic Characteristics of Peninsular Malaysia and Malaysian Legislative Districts, 1970

Source: Author's own calculations based on data from Malaysia (1970), Khoo (1981) and Election Commission, Malaysia (1971).

directly threaten the regime and force it to implement consumer-friendly policies which would lower food prices. This was evident in the 1969 protests in Kuala Lumpur which, though violent and shocking for the population and political leadership, never posed a significant threat to the regime, as they were effectively contained and did not spread to other urban centers (Goh Cheng Teik, 1971). Urban food consumers also had a relatively small voice in parliament, as only six seats of a total of 144 were allocated wholly to large urban centers, with a further twenty-five including both urban and rural areas. In addition, rural electorates were significantly smaller than urban electorates (Rudner, 1970, 10-12). The ethnic and economic structure of Malaysian society in the 1960s and 1970s was dominated by food producers and fundamentally favored the ruling Alliance, and UMNO in particular. The rural Malay population comfortably outnumbered the urban, Chinese and Indian populations, particularly if one considers the peninsular electoral districts. As Scott's (1985) seminal study makes very clear, and as I discuss in Section 5.3.3, this population of food producers at this time did not pose a direct revolutionary threat to the regime, but instead was well integrated into grass-roots political structures which funneled mass support to UMNO. As we have seen, Malaysia's constitution did not allow for checks

and balances on the party commanding a majority in the lower house, and therefore as long as the Alliance could maintain its electoral support base among the rural Malay population it retained a monopoly on political power in the country.

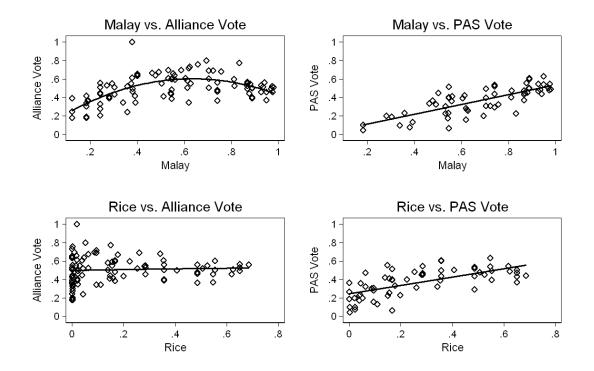
However, the 1969 election forcefully illustrated the flagging support of this crucial section of the electorate for the Alliance. For the first—and until 2008, only—time in the history of Malaysia, the ruling coalition lost its two-thirds supermajority in the *Dewan Rakyat* as it lost twenty-three seats and its share of the popular vote fell from 59% to 45% (see Table 5.2).¹² In the aftermath of the election, violent riots in Kuala Lumpur led the government to suspend parliament and declare emergency rule. This was a critical juncture in Malaysian politics and in the development of agricultural and development policy in the country.

Contemporary analyses of the election (Rudner, 1970; Ratnam and Milne, 1970) noted that the large losses experienced by the Alliance in 1969 came as a surprise. No single political issue, like independence in 1959 or the confrontation with Indonesia in 1964, dominated the campaign and what Rudner (1970, 2) describes as 'domestic tranquility' suggested that the Alliance government was well supported by the electorate at large. However, without an over-riding drive for national unity or an external threat, voters deserted the inter-ethnic governing coalition for separate ethnic opposition parties in droves. Appealing to solely Malay (rural) and Chinese (urban) voters, the PAS, DAP and Gerakan made significant inroads into Alliance vote share.

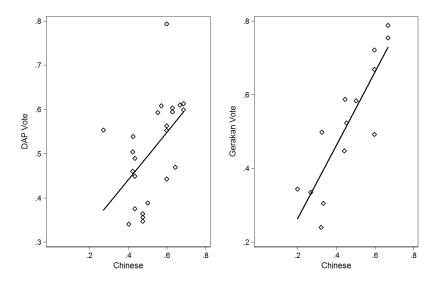
I ran OLS regressions estimating the vote share of the Alliance in the 95 electoral districts contested by at least one opposition party in peninsular Malaysia in 1969. The results of these models are reported in Table 5.4. Looking first at the ethnic correlates of Alliance vote share, in Models 1 and 2, there is a significant curvilinear relationship between the proportion of Malays in an electoral district's population and the share of votes received by Alliance parties. This relationship is graphed in the upper-left panel of Figure 5.2. Alliance candidates—who in Malay districts were predominantly from UMNO—fared best where Malays made up a majority of voters in an electorate, but not an overwhelming majority. As illustrated in the upper-right panel of Figure 5.2, in districts with a very high proportion of Malay population, above 0.7, the Islamist Malay PAS did at least as well as the Alliance, and was in many cases able to snatch electoral victories from UMNO.

 $^{^{12}}$ The two-thirds supermajority is required to make constitutional amendments, for example those changing the powers and composition of the Electoral Commission.

Figure 5.2: 10 May, 1969 Election Results: PAS Makes Inroads in Malay, Rice-Growing Areas



Source: Malaysia (1970); Election Commission, Malaysia (1971). Graphs are for peninsular Malaysia only; elections in Sabah and Sarawak were delayed due to the unrest of 13 May. Graphs are scatter-plots with best fit lines, not model results (see Figure 5.5 for results of models in Table 5.4) and thus confidence intervals are not included.



Source: Malaysia (1970); Election Commission, Malaysia (1971). Models are for peninsular Malaysia only; elections in Sabah and Sarawak were delayed due to the unrest of 13 May.

The share of Chinese and Indians in an electoral district, by contrast, was not significantly associated with Alliance vote share in Model 2. Because they did not contest every seat, it is more difficult to gauge overall levels of support for the non-Malay opposition parties, of which the most prominent were the DAP and Gerakan which won 13 and 8 seats, respectively. Where they did compete, these parties were able to win seats over Alliance candidates where the share of the Chinese population was higher. The correlations between the share of a district's population which was Chinese and the vote share of these two parties are illustrated in Figure 5.3. Therefore, the MCA experienced a severe setback in terms of credibility among its core Chinese electorate in 1969, as voters migrated to non-Malay parties outside the Alliance.

I also estimated economic models which examine the correlations between employment by sector and Alliance vote share in 1969. Model 3 includes as independent variables measures of landholding inequality, total agricultural employment and of the shares of manufacturing, transport and communications, commerce and services in total employment. Excluding the ethnic composition of each district, this model is a relatively poor predictor of Alliance

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Ethnic	Ethnic	Econ.	Econ.	Comb.	Comb.	Comb.
Malay	1.79^{***}	1.96^{***}			1.38^{**}	0.96	1.80**
	(0.62)	(0.50)			(0.63)	(0.60)	(0.68)
Malay Sq.		-1.30***			-1.00***	-0.98***	-1.68***
		(0.21)			(0.23)	(0.21)	(0.41)
Rice				-0.04		0.00	-3.32**
				(0.12)		(0.15)	(1.42)
Malay*Rice							7.41**
							(3.49)
Malay Sq.*Rice							-3.88*
							(2.11)
Chinese	1.55^{**}	0.33			0.27	-0.29	-0.15
	(0.66)	(0.51)			(0.63)	(0.59)	(0.57)
Indian	1.84^{***}	0.23			-0.02	-0.29	-0.07
	(0.58)	(0.52)			(0.67)	(0.64)	(0.64)
Land Gini	. ,	. ,	0.47	0.42	0.56	0.56	0.56
			(0.34)	(0.32)	(0.35)	(0.38)	(0.38)
Fishing				3.38**		3.77**	4.39**
-				(1.52)		(1.72)	(1.71)
Rubber				0.14		0.16	0.17
				(0.14)		(0.14)	(0.13)
Manufacturing			-0.15	0.32	-0.19	0.35	0.43
			(0.73)	(0.68)	(0.65)	(0.65)	(0.59)
Trans/Comms			1.22	0.73	0.87	0.20	0.75
,			(1.57)	(1.48)	(1.45)	(1.44)	(1.38)
Commerce			-2.61***	-1.69***	-1.54**	-0.64	0.02
			(0.65)	(0.64)	(0.75)	(0.65)	(0.72)
Services			0.38	-0.26	0.28	-0.29	-0.73*
			(0.46)	(0.44)	(0.43)	(0.42)	(0.44)
Total Ag			0.05		0.15		. ,
Ũ			(0.18)		(0.21)		
Constant	-1.19*	-0.23	0.45**	0.43**	-0.20	0.23	-0.07
	(0.62)	(0.48)	(0.21)	(0.17)	(0.74)	(0.67)	(0.65)
R^2	0.175	0.393	0.351	0.428	0.464	0.525	0.564
Observations	95	95	95	95	95	95	95

Table 5.4: OLS Regressions of Alliance Vote (%) in 1969 on District Characteristics

Standard errors in parentheses * p < 0.10, ** p < 0.05, *** p < 0.01

All models with robust standard errors.

vote share and explains less of total variance than Model 2. Only the share of commercial employment significantly negatively correlated with votes for the ruling coalition. Interestingly, rural areas with higher levels of agricultural employment, which were predominantly Malay, were not significantly more likely to vote for the Alliance than areas with lower levels of agricultural employment in Model 3.

Districts with a more unequal distribution of landholdings, indicated by a higher land Gini coefficient, were not significantly more likely to vote for the Alliance, a result which also holds for all further models. This result is somewhat puzzling, in light of Scott's (1985) study which shows that large Malaysian landowners tended to be staunch UMNO supporters and to have significant power in local politics to promote the interests of the party. I explain this lack of a significant relationship between landholding inequality and Alliance support through the lack of variation in landholding inequality in rural areas. As the graphs in Figure 5.4 illustrate, the areas in Malaysia which had very high levels of landholding inequality were urban areas, with lower shares of Malay population. Penang and Selangor, the most economically developed and Chinese areas in Malaysia, had the highest average landholding Gini coefficients, 0.53 and 0.52, respectively. Variation was also relatively high in these states, with rural areas having a landholding Gini of 0.39 in Selangor versus a Gini of 0.60 in urban areas. In the rural Alliance strongholds of Kedah and Pahang, average landholding Ginis were much lower (0.38 and 0.37, respectively) and variation was much smaller, with a difference of only 0.05 and 0.06 between rural and urban areas.¹³ Among the rural Malay strongholds of UMNO, there was very little variation in landholding inequality. Therefore, this variable does not explain much variation in the election results over and above variables capturing variation in ethnicity and employment. Landholding inequality therefore did *not* fulfil the same role in driving election success for rural-based parties in Malaysia as it did in the Imperial German case explored in Chapter 4; the rural-urban cleavage in Malaysia ran along economic (food consumers versus producers) and ethnic (Chinese versus Malay) lines, with very little division among rural areas, such as that driven by landholding inequality or confession in Imperial Germany.

Model 4 takes as independent variables more fine-grained data which distinguishes between different agricultural sectors, in order to identify the most supportive groups for the

¹³ See for example the graphs comparing rural and urban Johor in Figure A.8, Appendix A.

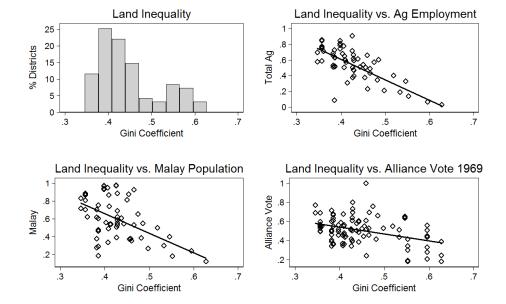


Figure 5.4: 10 May, 1969 Election Results: Landholding Inequality Is Not a Good Predictor of Support in Rural Areas

Source: Malaysia (1970); Election Commission, Malaysia (1971). Graphs are descriptive only, therefore confidence intervals are not included.

Alliance in rural areas. It does not control for ethnicity, and illustrates how this factor overlapped with economics in Malaysia at this time. Model 4 performs slightly better than Model 3 in predicting the Alliance vote, and reveals that areas with higher levels of employment in fishing were particularly staunch strongholds for the ruling coalition, which is unsurprising given this community's traditional ties to UMNO. Districts with higher levels of employment in the commercial sector, which was traditionally dominated by the Chinese (and correlated with Chinese population share at r = 0.75), were less likely to vote for the Alliance. This reflects this group's defection to DAP and Gerakan in 1969. Interestingly, no other sectors were significantly correlated with the Alliance vote in this purely economic model, illustrating the importance of ethnicity to voting and Malaysian politics in the late 1960s.

The best-performing models of Alliance vote share combine variables measuring both the ethnic and economic composition of legislative districts. Model 5 combines the ethnic Model 2 and Model 3, which includes a variable measuring agricultural employment as a whole. It provides a slightly better model fit than the purely economic models, but does not provide any new insights. Model 7, on the other hand, includes the fine-grained variables measuring differences in employment within the agricultural sector and their interactions with ethnic variables. Here, the political importance of the rural food producing sector, rather than urban sectors, in the 1969 election is clear, as show in Figure 5.5. Interactions of the proportion of Chinese population and the share of commercial employment surprisingly do not reveal significant relationships with support for the Alliance.¹⁴ Rice-producing areas did play a significant role in the Alliance's electoral losses and therefore contributed to the subsequent political unrest in the country. Districts with very high levels of Malay population were less likely to vote for the Alliance, as shown in the upper-left panel of Figure 5.5. Areas with greater rice employment were also less likely to vote for the Alliance, as shown in the upper-right panel. Districts with more employment in fishing, a traditional occupation of Malays and strongly associated with UMNO support, were more likely to vote for the Alliance, as shown in the lower-left panel. Employment in the services sector was associated with losses for the Alliance, as shown in the lower-right panel.

To summarize the results of these models, the 1969 election was a shock to the Alliance,

 $^{^{14}}$ I do not include all these model variations in Table 5.4.

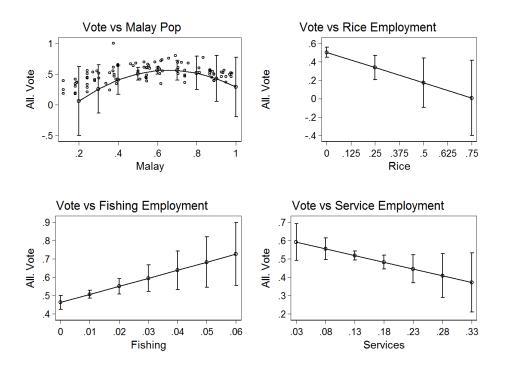


Figure 5.5: 10 May, 1969 Election Results Models

Source: Model 5, Table 5.4. Marginal effects and confidence intervals generated using the Margins package in Stata.

although it did not threaten its majority in the lower house and ability to pass legislation. It was a shock to UMNO, because in its areas of traditional support, where the population was heavily Malay and the economy was devoted primarily to rice farming, its vote share was significantly lower than in other areas. The PAS and Malay hard-liners within UMNO profited from this electoral collapse. For the junior partner in the Alliance, the MCA, the results were similarly shocking and proved to be of more consequence due to the party's relatively small parliamentary power base compared to UMNO. In urban Chinese districts, voters abandoned the ruling coalition party for non-Malay parties, DAP and Gerakan, leaving only a very small number of MCA mandates in strongholds such as Penang.

These election results were to have decisive effects for post-1969 politics within the Alliance, as a state of emergency was declared and the country made a decisive authoritarian shift. The MCA was significantly reduced in strength within cabinet, while supporters of opposition Chinese parties led victory parades through the streets of Kuala Lumpur in the days following the election, provoking Malay residents into counter-demonstrations which were to escalate into violence. UMNO's losses in its traditional strongholds, where the population was predominantly Malay and engaged in rice farming, strengthened the hand of hard-liners within the party who were demanding that government economic policy be weighted more heavily in the favor of these areas. The shift in intra-elite bargaining power set in motion by the 1969 elections had decisive effects on agricultural policy and regime stability, as I will go on to show in the rest of this case study.

5.4 Producer and Consumer Preferences and Agricultural Policy Before 1971

The political crisis sparked by the 1969 election in Malaysia was to set in motion events which would change the balance of power within the ruling coalition to the advantage of rural UMNO elites. To placate this ascendant group, the new government under Prime Minister Razak would implement agricultural policies in line with rural Malays, particularly the politically powerful rice growers. In 1960s and 1970s Malaysia, the preferences of rice farmers and their UMNO patrons lay in an interventionist government policy which would increase the price which they received for *padi*, as unmilled rice is called in the country. The exact means by which this policy goal was to be achieved by the government were not specific and could run through various measures, from a minimum price support, to input subsidies, or regulation of middlemen such as millers and buyers. However, Malay rice producers and their UMNO champions had, since independence, favored "drastic and direct government involvement" in the agricultural sector in order to increase the incomes of rural Malays (Heng, 1996, 5-7). Urban Chinese food consumers and processors were able to prevent such a policy from being implemented until the aftermath of the 1969 election and the introduction of the New Economic Policy in 1971.

British colonial policy had not been very favorable towards Malay rice farmers. Due to the relatively mountainous terrain in much of the peninsula, modern Malaysia has never been entirely self-sufficient in rice, even when the sector faced a very benign policy environment, and Malay rice producers were traditionally smallholders and relatively poor. Reluctant to commit government funds to supporting rice producers, the British had resisted using price supports to alleviate rural poverty and encourage higher yields, even in the face of shortages and widespread hunger in the post-war era (Tamin and Meyanathan, 1988).

Colonial policies had forbidden the sale of paddy land to non-Malays, and therefore rice growers were (and are still today) universally Malay. Due to their strong UMNO component, the first Alliance post-independence governments were already much more responsive to food producers' interests than the British administration. A guaranteed minimum price scheme was established, and the government rice stockpile was combined with some import restrictions in order to bolster domestic prices at the expense of consumers, who paid more for domestic rice and could not always access higher-quality foreign rice (Pletcher, 1989).¹⁵ This was significant, given that the average urban Malay resident's diet consisted of 40% rice in 1960, expenditure on which accounted for around 18% of consumers' total income (Brown, 1973, 164). Agencies such as the Federal Agricultural Marketing Authority (FAMA) and the Padi and Rice Marketing Board (PRMB) were established to implement government policies supporting rice farmers and to oversee rice milling and marketing (Tamin and Meyanathan, 1988, 103). However, producer support policies did not involve large market distortions during this period, as shown in Figure 5.6, moving

¹⁵ Both the guaranteed minimum price scheme and the rice stockpile had been introduced under the British colonial administration, but had not been used in a way which caused significantly higher prices for farmers (Brown, 1973).

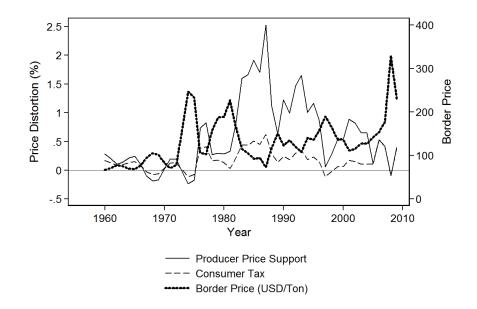


Figure 5.6: Rice Policy in Malaysia and International Price Fluctuations, 1960-2010

Source: Anderson and Valenzuela (2008); Anderson and Nelgen (2012) and The World Bank (2012a).

mostly in tandem with world markets to smooth farmers' income levels and not reaching levels of more than 25% of world market prices.

Development schemes, especially irrigation projects which allowed farmers to harvest a second annual rice crop, also went some way to enhancing rice farmers' welfare in 1960s Malaysia. The Muda river scheme in the north-western states of Kedah and Perlis, for example, irrigated a full one-third of the country's padi land and allowed for double-cropping in this area (Brown, 1973, 165). The introduction of high-yield 'green revolution' rice varieties, such as those developed and tested by the Rice Production Institute in Malaysia, also increased production on many rice farms, though these gains accrued disproportionately to larger rice farmers (Scott, 1985; Tamin and Meyanathan, 1988).

However, agricultural policy in Malaysia before 1971 was largely laissez-faire, as significant government intervention in food markets ran directly against the interests of the urban population and the MCA. Urban food consumers, predominantly Chinese, naturally favored non-intervention in markets in the hope of benefiting from low average world food prices in the 1960s (Brown, 1973, 167). Chinese politicians also vehemently opposed a more interventionist policy turn in the agricultural sector due to their constituents' interests in rice trading and processing, and in a laissez-faire economic policy in general.

The role of rice traders and millers, who often doubled as rural financiers, had commonly been regarded as harmful to farmers who were seen as exploited by their lending practices and monopsonistic positions in the countryside (Tamin and Meyanathan, 1988, 101-102). These middlemen had traditionally been Chinese, because of colonial policies which restricted Malay movement out of the primary sector. A popular policy proposal among Malay farmers and politicians was the establishment of collective rice mills and state-run rice marketing agencies. However, MCA opposition to such policies was able to minimize such government intervention in rice markets until its position within the ruling coalition was severely weakened after 1969. For example, in 1963 the MCA leader and Minister of Finance, Tan Siew Sin, persuaded Prime Minister Rahman to remove the UMNO politician Abdul Aziz Ishak from office after he proposed a radical policy which would have set up state rice-milling cooperatives and cut Chinese millers out of the market (Heng and Sieh, 2000, 128-131). Chinese politicians representing food consumers were able to restrict the goal of policy at this point to "resolving marketing problems of paddy smallholders by minimalist intervention ... to ensure the orderly and efficient working of market forces" (Tamin and Meyanathan, 1988, 101).

Apart from the specific matter of Chinese middlemen's positions within the rice sector, the MCA elite consisted primarily of businessmen, whose interest in lower food prices was combined with a strong aversion to pro-Malay government intervention in the economy (Heng, 1988, 73-82). Because of British colonial policies which kept Malays predominantly tied to their traditional occupations in agriculture, before independence the Chinese had already occupied the central role in the construction, transportation, commerical, financial and services sectors in the country. Therefore, the sorts of wide-ranging interventions to increase Malays' opportunities in these areas which were often proposed by Malay politicians met strong opposition by MCA politicians. Chinese political leaders ensured that a clause was included in the independence constitution which prevented parliament "restricting business or trade solely for the purpose of reservation for Malays." Following independence, free markets and open competition did indeed bring considerable economic rewards for Chinese businessmen, who by 1970 dominated the ownership of capital in the country alongside foreign investors, with Malay and Indian ownership of fixed assets amounting to only 1 percent of the total (Heng and Sieh, 2000, 128-131).

Rural development projects and a moderately supportive price regime were not enough to remedy the relatively low incomes which predominated among Malaysian rice farmers even after a decade of independence. There was a continuing perception among the Malay population and UMNO politicians that the sector was being exploited by middlemen, and existing policies did not give rice farmers the support they needed in order to make a respectable living. The election of 1969, the subsequent urban unrest and a shift in power from the MCA towards Malay hard-liners within UMNO provided the political opportunity to implement policies which significantly increased the incomes of food producers.

5.5 Making Policy: The Breakdown of the 'Bargain', UMNO Hegemony and Agriculture

Before 1969, the MCA had been able to contain interventionist interests within UMNO and their pushes for policies which would favor Malay food producers. Under the postindependence 'Bargain', Malays attained a predominant political position in an Islamic Malaysian state, while non-Malays were granted citizenship and a laissez-faire policy environment. The Bargain was underpinned by the balance of political power within the ruling coalition. Ethnic-based intervention in markets was ruled out in the independence Constitution, and MCA leader and Finance Minister, Tan Siew Sin, had the final say on economic policy within the Alliance cabinet. The election and its aftermath caused a decisive shift in the balance of power between UMNO and MCA within the Alliance, and led to UMNO political hegemony while strenghening the hand of radical Malay communalists within the party. The implementation of a new pro-rural, highly interventionist New Economic Policy followed. Policy was a result of a complex interplay between electoral politics, mass unrest and intra-elite bargaining.

The election result of 1969 was a blow for the Alliance as a whole, and for UMNO as it lost three seats to the Islamic PAS. The MCA, however, fared particularly poorly, as both Gerakan and the DAP emerged as serious contenders in urban Chinese seats. Their success is illustrated in the results shown in Figure 5.3, and also by the fact that Gerakan and the DAP were able to win eight and thirteen seats in the Dewan Rakyat, respectively. The MCA was discredited within its core constituency; as Rudner (1970, 13) noted in the direct aftermath, "it is clear that the MCA can no longer claim custody over Chinese interest aggregation", and it is disputable whether it ever held a predominant position among this community in Malaysia again.

The MCA's 1969 losses in urban seats had both direct and indirect consequences. The direct consequence was that the party dramatically lost weight within the ruling coalition. Facing harsh criticism from more chauvanist Malay politicians in UMNO, MCA leader Tan Siew Sin decided after the election not to take up any seats in a new cabinet, a decision which called into question the Alliance's self-appointed role as guarantor of inter-ethnic cooperation and political stability in the country (Means, 1991, 7). In the event, Tan's decision to remain outside cabinet did not take immediate effect as a state of emergency was declared and parliamentary government was suspended for 21 months in the wake of the unrest on May 13 (Lee and Heng, 2000, 207-208). The administration of the country in the interim was managed by a National Operations Council (NOC) under Deputy Prime Minister Abdul Razak. This body embodied a transfer of power from the multi-ethnic Alliance to a Malay coalition of UMNO politicians, the security forces and the bureaucracy. It included only one Chinese and Indian representative, with its remaining membership consisting of the (Malay) heads of the police, armed forces, public and foreign services, plus Razak (Means, 1991, 8-9). Within the NOC, and after 1971 in the enlarged Barisan Nasional government, urban food consumers' representation through the MCA was severely weakened.

The indirect effect of MCA losses was the outbreak of unrest in Kuala Lumpur, the outcome of which further undermined the position of the party within the ruling coalition. The exact course of events which led to the violent unrest on May 13 is not clear, but most scholars agree that their initial impetus was in Gerakan and DAP supporters staging 'victory' parades celebrating the Alliance's electoral losses in the May 10 elections (Goh Cheng Teik, 1971, 20). Racist language and provocations—from opposition and government supporters—led the situation to escalate into anarchy and violent clashes between ethnic mobs. The police and army forces called in to restore order were predominantly Malay, and particularly harsh in their treatment of Chinese. Almost all of the 6,000 Kuala Lumpur residents who lose their homes to looting and fires were Chinese (Means, 1991, 6-8). The May riots revealed the "undisputable fact of Malay superior political power backed up by overwhelming Malay-controlled military force ... the Chinese became keenly aware that in a show-down they lacked the means to impose their will on any issue of fundamental concern to the Malays" (Heng, 1988, 261). In short, the threat of urban Chinese food consumers to the regime was revealed to be easily manageable, and the MCA was still more easily marginalized by UMNO in post-1969 politics.

While the election losses and mass unrest were considerably weakening the MCA within the Alliance, UMNO's relatively poor showing was strengthening the hand of Malay chauvinist hard-liners within the party, who called for economic policies that privileged Malays at the expense of the urban non-Malay population. As illustrated above in Figure 5.2, UMNO candidates did not perform well in districts dominated by Malay population in 1969. Malay voters migrated to the PAS and its unequivocal advocacy of Malay interests, including policies granting assitance to Malay peasants, the implementation of more Islamic law and special rights for *Bumiputera* (Means, 1991, 5).

This shift did not go unnoticed by UMNO politicians. A vocal group emerged within the party—known as the 'Ultras'—who criticized the government under Tunku Abdul Rahman for neglecting the Malay population and making too many policy concessions to non-Malays. The visibility and demands of these Malay chauvinists was further enhanced by the unrest of May 13, following which racial tensions ran extremely high. Led by Mahathir Mohamad, an UMNO politician who had lost his Kedah parliamentary seat to PAS and later went on to become the party's leader and Prime Minister, these ultras mobilized radical Malays in Kuala Lumpur, especially at the University of Malaya, in vocal opposition to the UMNO leadership (ibid., 8-9). Mahathir penned an open and "deliberately offensive" letter calling on Prime Minister Rahman to resign, informing him that he was "the object of hatred of 'the Malays, whether they are UMNO or PMIP supporters" (Khoo, 1995, 22).

Rahman was able to dismiss Mahathir and another Ultra, former UMNO Executive Secretary Musa Hitam, from the party, criticizing their "wild and fantastic theory of domination by one race over the other communities" (Means, 1991, 9-10). However the resonance of this demand within the party and the broader Malay community could not be ignored. Although the Ultras' calls for a one-party government under UMNO earned them temporary exile from the party, they decisively undermined the authority of Rahman, and had a considerable effect on his successor Razak's strategy for recovering from the 1969 crisis (Khoo, 1995, 23-24). Rather than adopt a single-party dictatorship under UMNO, Razak did return the country to its former system of electoral authoritarianism after almost two years of emergency rule under the NOC in 1971. Alongside a policy called *Rukunegara*, which prohibited public discussion of many contentious political matters, Razak was committed to a program of deep economic reform which would benefit the impoverished and restive rural Malay population. As he put it in November 1969, "Democracy cannot work in Malaysia in terms of political equality alone. The democratic process must be spelt out also in terms of a more equitable distribution of wealth and opportunity" (Means, 1991, 11).¹⁶

The pre-1969 Bargain was thus destroyed. After the election and subsequent unrest in Kuala Lumpur, the balance of power within the Malaysian regime had shifted decisively away from the MCA and the more moderate wing of UMNO. Under pressure from the Ultras and the broader Malay population, Razak abandoned the central economic plank of the Bargain enshrined in the independence Constitution: the premise that the Malaysian government should not intervene in the economy for the benefit of Malays.

5.5.1 The New Economic Policy and Agriculture

Following the May 1969 crisis, Razak was the director of the interim governing body, the National Operations Council, and in September 1970 became Malaysia's second Prime Minister. Alongside a reputation as an efficient administrator and manager, Razak was widely perceived as a more pro-Malay politician than his predecessor, and he was determined to make UMNO the mass base of political support for the government, not an inter-ethnic coalition with the MCA and MIC. His vision of a Malay-dominated political system found its first realization in the NOC, which he used to determine the government's response to the crisis without gathering significant input from rival political groups. This primarily Malay body decided on policies, most notably the *Rukunegara* and the broad outlines of

¹⁶ Of course, Razak's understanding of democracy was not the same as what a political scientist would term democracy. See Chapter 1 for a brief discussion of what democracy is and is not in this study.

the NEP, and had them symbolically ratified by a National Consultative Council (NCC), a body including representatives from all ethnic groups and political parties in the country. This process took place behind closed doors, without formal voting, and the NCC consisted primarily of government officials and Malays. This interim government was able to restore order to the country and formulate coherent policy responses to the crisis, but it was a decisive step away from democratic accountability in Malaysia and raised the very real danger that parliamentary rule might never be restored (Means, 1991, 10-11).

Facing no formal opposition and without the need for agreement with the MCA, the NOC under Razak had a free hand in economic policy-making. However, in formulating and implementing the NEP, Razak's administration faced one significant problem, in that the bureaucracy was strongly opposed to his plans for an interventionist shift in economic policy. The country's main economic policy-making entities, the Economic Planning Unit (EPU), Treasury, the Bank Negara (Central Bank), the Statistics Department and Federal Industrial Development Agency all disagreed with Razak's plans. Pointing to the country's successful development record under a laissez faire policy environment coupled with strict fiscal discipline and a favorable environment for foreign direct investment, the EPU and its allies were alarmed at the government's plans for a radical, interventionist shift (Faaland, Parkinson, and Saniman, 1990, 27-29). Therefore, Razak was compelled to create a new economic planning agency reporting directly to the Prime Minister's department, the Department of National Unity (DNU), which identified with his new priorities in policy-making (Heng, 1997, 265). The DNU argued that the 1969 riots were evidence of fundamental structural deficits in Malaysia, through which the Malay population was destined to languish in poverty and pose a risk to national political stability. For the DNU, economic growth was only desirable to the extent that it was coupled with decreasing inter-ethnic inequality in incomes, as well as in other development outcomes such as sectoral employment, health and education (Faaland, Parkinson, and Saniman, 1990, 31-34). The DNU approach, rather than the preferences of the EPU and its allied ministries, was reflected in the formulation of the NEP, which embodied a radical shift away from previous economic policy-making in its seven main goals (ibid., 69-72):

• A reduction in urban and rural poverty, regardless of race, but due to the relatively low incomes of the Malay populations this goal came to focus on rural Malays;

- A reduction in racial economic imbalances in terms of income, employment and wealth. Again, due to the initial position of the Malay population, in practice this involved decreasing barriers to Malay participation in the economy;
- A target growth rate of 6.4% per annum until 1985. Through growth coupled with redistribution, it was hoped that the ambitions of the non-Malay population could be addressed;
- Full employment;
- An active role for Federal and State governments in ensuring that Malays achieved more equal levels of participation in the economy;
- Supplemental policies for ameliorating ethnic conflict in the country;
- A comprehensive apparatus for implementing policies directed at the above goals, and monitoring progress towards them.

The New Economic Policy, as laid out in the Second Malaysia Plan, had important consequences for the rural sector, and for rice policy in particular. Indeed, increased support for rural Malay farmers was the primary element of the new development strategy laid out in the DNU's policy recommendations (Faaland, Parkinson, and Saniman, 1990, 49-52). The most important institutional innovation of the new era in rice producer supports was the creation of the National Padi and Rice Authority (LPN) in 1971.¹⁷ The Authority had four basic roles: to ensure fair and stable prices for rice farmers; to ensure fair and stable prices for consumers; to ensure sufficient rice supplies including imports; and to make policy recommendations for the development of the rice industry. It became the sole importer of rice to Malaysia, and the sole authority able to grant licenses to millers, wholesalers and traders. The LPN became responsible for administering the government guaranteed minimum price and price subsidy schemes for rice, which dictated prices for unmilled rice and also granted farmers a lump sum payment for each ton of unmilled rice delivered to mills (Tamin and Mevanathan, 1988, 99-125).

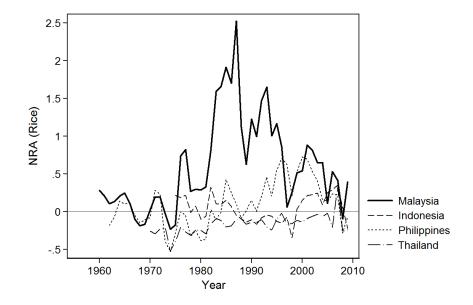
 $^{^{17}}$ In 1994, LPN was corporatized and renamed National Rice Corporation (Padiberas Nasional Bhd/BERNAS).

In addition, the LPN became directly involved in rice markets, as a miller and wholesaler, gradually driving private middlemen out of the market by accepting lower quality produce from farmers at higher prices than private enterprises, and granting them large lump-sum 'discount' payments for deliveries. The creation of the LPN therefore ran directly against the interests of Chinese rice millers and traders, as staunchly defended by the MCA until their exile from government in 1969. As a result, the proportion of unmilled rice purchased by the private sector declined from 88% to 54% between 1974 and 1985, a trend which continued despite the government agency's rising deficits (ibid., 114, 125).

The activities of the LPN ran directly against private rice millers and traders, the long-time scapegoats of politicians who blamed them for widespread poverty among rice producers, but its price policies also privileged rural farmers at a direct cost to urban consumers, by increasing rice prices. Through the guaranteed minimum price scheme and its control of rice imports, LPN moved to significantly increase the price of rice in Malaysia after the implementation of the NEP, as shown in Figure 5.6. The minimum price paid to farmers increased from M\$264 to M\$463 in 1975. As international food market prices declined after the first oil shock in 1973, domestic producer prices in Malaysia soared, averaging 25% above world market prices for the 1970s as a whole and reaching levels double or triple world market prices in the 1980s. In the 1980s, consumer rice prices in Malaysia reached levels 20% to 40% above those on world markets. These rural-biased policies were significantly more advantageous to rice farmers than those of neighboring governments in South-East Asia, as shown in Figure 5.7. Malaysia's levels of price supports for rice farmers were above those of Indonesia, Thailand and the Philippines from the mid-1970s until the late 1990s, and in the 1980s they were over one hundred percentage points higher than those in these other countries, which provided at best a neutral price policy compared to world markets.

Apart from these measures affecting the price received by rice farmers, the government also implemented a number of input subsidies under the NEP. Farmers were sold urea fertilizer at heavily subsidized rates, and given seed, chemicals and insecticides free or at low prices. Access to credit for rural farmers was also enhanced under the government-owned *Bank Pertanian Malaysia* (Malaysian Agricultural Bank), which gave short-term loans at zero interest or below-market interest rates (ibid., 107-109). This institution further impeded





Source: Anderson and Valenzuela (2008); Anderson and Nelgen (2012).

the activities of private rice traders in the countryside, who had traditionally also provided much of the rural lending in these areas.

The effects of the interventionist policy on rice farmers' incomes was significant. Jomo K.S. (1984) found that government price supports and input subsidies were crucial for increasing the incomes of rice smallholders and reducing poverty among this group. The poverty incidence rate among rice smallholders declined from 88% in 1970 to 77% in 1975 and 55% in 1980, and this cannot be accounted for by productivity gains but only through the increases in rice prices dictated by the government under the NEP. Larger farmers, who tended to be well connected to UMNO (Scott, 1985), gained even more than smaller farmers, because the absolute value of government support varied either directly or indirectly with the size of holdings. Fertilizer subsidies, for example, were based on a per hectare application rate. Price supports are, of course, based on output volumes and therefore even under constant returns to scale tend to benefit larger farmers. In 1981-82, for example, the largest 25% of farmers received 75% of the rice coupon subsidy in Malaysia (Tamin and Meyanathan, 1988, 135-137).

The political crisis of 1969 led to the decline of urban food consumer's power within the ruling coalition, as the MCA withdrew from cabinet and UMNO ultras had a growing influence on government policy. In order to address this shifting support coalition and placate ascendent rural Malay interests, the new Prime Minister Razak implemented the interventionist New Economic Policy. By increasing consumer food prices and decreasing the share of rice processed and traded by private companies, the NEP ran directly counter to the interests of urban food consumers and Chinese businessmen. However, it simultaneously benefited the Malay interests which had become significantly more powerful within the ruling coalition since the election and unrest of May 1969. By using a more interventionist agricultural policy to address these interests, Razak was able to shore up flagging support for the Alliance and maintain regime stability in the country.

5.6 The Effects of the NEP and Agricultural Support on Regime Durability

In the short term, the introduction of the NEP served to placate hard-line Malay politicians within UMNO and prevent a shift towards one-party dictatorship. In the wake of the 1969 political crisis, the Malysian regime was in danger of collapsing into single-party rule under UMNO. This was primarily due to the challenge of chauvinist Malay 'Ultras' within UMNO, and their demands for Malay political hegemony in the country. Politicians such as Mahathir Mohamad had become a powerful and vocal group in the ruling party and the Malay community after the events of May 1969, calling for the resignation of Prime Minister Rahman who they portrayed as an apologist for urban Chinese interests and demanding radical measures be taken which would increase economic opportunities for Malays, at the expense of other ethnic groups (Khoo, 1995, 19-30).

This group advocated for the continuation of the autocratic government in place under the Malay-dominated National Operations Council, the interim governing body installed in the wake of the May unrest. In opposition was the first generation of Malaysian leaders around Tunku Abdul Rahman, who were convinced of the need for a parliamentary, electoral regime to ensure the popular support and legitimacy of the government. The new Prime Minister Razak, in Means' (1991, 10-12) account, was convinced that government could

not return to 'business as usual' and agreed to a return to parliamentary government only on the condition that drastic measures be taken to restructure society and "overcome the inferior economic position of the Malays" (ibid., 11). The new generation of Malay elites within UMNO were only prepared to accept a reprise of the pre-1969 regime which included electoral institutions in Malaysia in conjunction with the New Economic Policy and the interventionist, pro-farmer agricultural policies which it entailed.

Razak's advocacy of the NEP, and the creation of the Department of National Unity with which to formulate and implement it, therefore placated the demands of the Malay Ultras within UMNO and allowed the Malaysian regime to restore parliamentary government, avoiding the instability of a true regime change to single-party authoritarian rule. However, the Malaysian regime after 1971 was not the same as its pre-crisis predecessor. In Razak's first Cabinet, all ministerial positions were filled by Malays from UMNO except for the MCA leader Tan Siew Sin, who continued as Minister of Finance until 1974. First-generation leaders from the Rahman administration were removed from Cabinet and replaced with pro-Malay hard-liners who had been elevated to powerful positions within UMNO in party elections. These hard-liners included Ultras such as Mahathir and Musa Hitam who had been ejected from the party by Rahman (ibid., 21).

In order to minimize opposition to the government's new economic policies, and to avoid political mobilization over extremely sensitive ethnic issues, Razak also moved to create a larger institutional structure to replace the Alliance and co-opt a larger group of parliamentary parties into the UMNO regime. The result was the *Barisan Nasional* (BN/National Front), a new organization which was to field candidates in the first post-1969 elections in 1974. Decisions on the number of seats to be contested by each party were henceforth to be decided by the UMNO leader, and BN formulated policies in a Supreme Council headed by the UMNO leader. BN incorporated the main parties from the Bornean states of Sabah and Sarawak, plus Gerakan, the People's Progressive Party and the Pan-Malaysian Islamic Party (PAS) (Milne, 1975). It therefore massively impeded the size and capabilities of the opposition, as well as the power of the MCA within the government, as it was no longer the sole representative of Chinese interests within the ruling coalition. The position of UMNO, as the arbiter of disputes within BN and with its ability to disburse political patronage in order to induce cooperation from coalition members, was even stronger than under the Alliance (Means, 1991, 27-32). In 1974, BN handily defeated the opposition in parliamentary elections, winning 88% of the seats and 61% of the popular vote (see Table 5.2).

After the 1974 elections, the Malaysian regime under UMNO had emerged from the shadow of a severe political crisis in 1969. Although the country had avoided slipping into a truly one-party dictatorship, because junior partners have always been included in the ruling coalition, it had definitely become less competitive: Case (1996) describes the post-1969 era as one of "UMNO Paramountcy". The introduction of the NEP and its support for rural Malays played a key part in easing intra-elite conflicts and directing the regime away from total collapse, and the new orthodoxy of pro-Malay policies continued, leading to new requirements for Malay ownership and employment in private businesses, for example (Heng, 1988, 263-264). However, it is more difficult to assess the impact of the NEP's agricultural support programs on mass politics, that is, support for UMNO and BN in the rural Malay areas which had abandoned the ruling coalition in 1969 and sparked the crisis. Jomo K.S. (1989) argues that the main economic benefits from the NEP ended up accruing to the elite political class who were able to benefit from widespread corruption and access to government rents under the new interventionist regime. UMNO and MCA had no interest in broad distribution of the benefits of development, but instead directed state support and protection to particularly powerful interests within their ranks. Combined with the authoritarian shift in Malaysian politics after 1971 and the increasing irrelevance of electoral politics to the regime, it seems that on balance, the agricultural protection regime's political purpose was more to ease intra-elite power struggles than to shore up mass support for the regime.

5.7 Conclusion

Malaysia is one of the most puzzling cases of stable authoritarianism in the world, given its remarkably high level of development and the political transitions experienced by its South-East Asian neighbors. In this chapter, I have shown that at the most critical period of political instability in Malaysia's history, after the ruling coalition's surprise election losses in 1969, an interventionist, pro-rural agricultural policy was a key element of the regime's strategy for easing intra-elite discord and restoring stability to the regime. I have therefore called into question the dominant explanations for continued authoritarianism in Malaysia, which focus on intra-elite cooperation facilitated by party structures and electoral institutions. Cooperation between competing factions within the ruling coalition displayed extreme volatility in the late 1960s which threatened to bring the regime as a whole to its knees; only through his pro-Malay and rural-biased New Economic Policy was Razak able to persuade restive UMNO hard-liners to support the restoration of parliamentary government.

Politics in Malaysia after 1971 was characterized by stable BN government at the federal level, with both the participants in the political system and the scope of policy changes severely constrained. Real participation in Malaysian politics was effectively limited to the leaders of the BN constituent parties, while non-BN party leaders and most of the voting public were reduced to to roles of permanent opposition and political observers, respectively. Policies such as the NEP and the *Rukunegara* were deemed too contentious for debate, and decisions in other areas were made in non-public inter-communal bargains within BN. Due to the predominant position of UMNO in the new ruling bloc, the most important political divisions within the country became those within UMNO. For example, the competition between Mahathir Mohamad and Tengku Razaleigh for the UMNO Presidency in 1987 was probably the most important political conflict in the country's post-1971 history, leading as it did to a concentration and personalization of power in Prime Minister Mahathir (Means, 1991; Slater, 2003).

The interventionist economic policy shift begun in 1971 under the NEP can be said to have contained at least some of the seeds of the Malaysian regime's current difficulties, however. Because the MCA could no longer attain UMNO support for its constituents' most important interests (a laissez-faire economic policy environment), the party continued to struggle to garner support from urban non-Malay voters. The "general feeling of being used for political support of the government while being largely ignored in policy matters" in turn led to intra-party strife and a further problems for the MCA (Means, 1991, 57). Although opposition parties found it difficult to make any progress against BN electorally for several decades after its formation in 1974, the last two general elections in 2008 and 2013 have seen dramatically reduced support for the ruling coalition under UMNO, especially among non-Malay and urban voters (Pepinsky, 2009).¹⁸ There are, of course, many reasons for this decrease in BN support. However, one contributing factor is the effect of the NEP. Because the reputation of the non-Malay BN parties has been so discredited since the introduction of the NEP, they now struggle to win support from their core constituencies, which in turn has become a major problem for the BN government. Therefore, although the interventionist, pro-rural shift which the NEP embodied was essential for restoring short-term intra-elite stability in the country after the events of 1969, the long-term effects of this policy, which essentially aimed to fundamentally change the socio-economic structures of the country, could not have been foreseen and may not have been as effectively managed by UMNO.

¹⁸ See also Pepinsky's online analysis of the 2013 election results at http://themonkeycage.org/2013/ 05/13/post-election-report-2013-malaysian-election-part-ii/.

Chapter 6

Conclusion: Authoritarianism, Development and Democratization

In this dissertation, I adapted the Stigler-Peltzman model of economic policy to the authoritarian context in order to construct a theory of agricultural policy under autocratic governments. I showed that authoritarian leaders trade off the interests of producers and consumers in policy-making in an attempt to buy off challengers and remain in power. I have therefore brought to light a new source of authoritarian regime durability—agricultural pricing policy—which has not been explored by previous scholars. In addition, by showing that the interests of rural elites weigh at least as heavily in the policy-making process as those of urban food consumers, I have made a novel and important contribution to the literature on the determinants of agricultural policy under authoritarianism. However, the findings presented in this dissertation have deeper consequences for the study of authoritarianism and democratization, because they suggest that previous approaches to the link between development and democracy have neglected to explore the ways which the development process is not an exogenous influence on regime type, but itself influenced by authoritarian politics and development policy.

Investigating the correlation between development and democracy, and establishing under which conditions development leads to authoritarian regime breakdown and a democratic transition, is perhaps the most prominent field of research in Comparative Politics. However, a close reading of the most important works in this literature reveals that they suffer

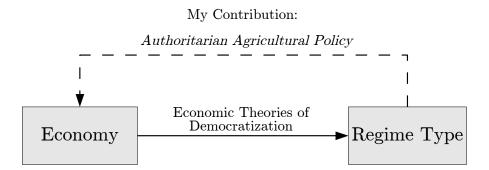


Figure 6.1: Economic Theories of Democratization and My Contribution

from a common shortcoming: they treat the economy as exogenous to regime type and draw one-directional lines of causality from socio-economic structures to the form of government in a country. The findings of my work suggest that this depiction of the relationship between development and regime type is incomplete. I have shown not only that agricultural policy is made by different rules under democracy compared to dictatorship, but that policy varies *among* authoritarian regimes. Furthermore, because agricultural policy has a large effect on the development process, it goes on to determine the chances for regime change, as depicted in Figure 6.1.

This feedback loop between authoritarian politics and development, which runs through economic policies like those examined in this dissertation, is not highlighted in previous economic theories of democratization. In his influential work, Barrington Moore (1966) asserts that the crucial group demanding democracy in historical European cases was the urban middle class, the bourgeoisie, whose wealth and political power were based on factors exogenous to the policies of the rulers. Motivated by their desire to manage their own business affairs and maximize profits, the bourgeoisie was destined to collide with the monarchy's ambitions to regulate and tax commerce (ibid., 13-14). Therefore, where a wealthy and independent commercial class emerged in the absence of a strong and repressive state apparatus, as it did in England due to the international wool trade, parliamentary democracy was the result. Here, absolutist monarchs' economic policies demands for greater revenue—did not lead to regime consolidation, but had the unintended effect of spurring capitalist development in commerce and agriculture and strengthening the position of the bourgeoisie vis-a-vis the crown (ibid., 419-420).

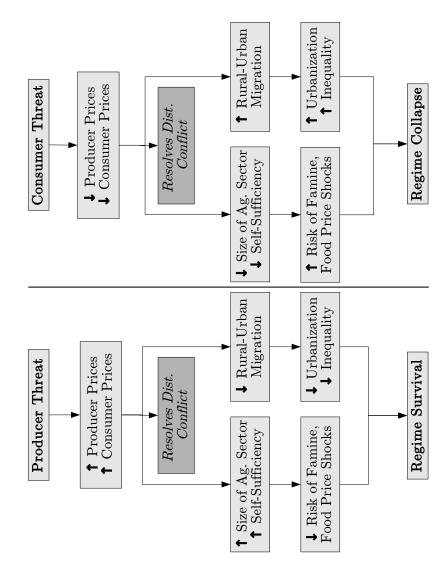
A similar approach has been taken by more recent scholars of democratization and authoritarianism. Distinguishing between groups not entirely dissimilar to the classes analyzed by Moore, they see the democratization process as a game between rich or landed elites, the urban middle classes and a large number of poor citizens in a country. In the approach of Boix (2003) and Acemoglu and Robinson (2001, 2006), this game revolves around the redistributive consequences of democracy: because democratic governments are expected to impose policies which redistribute incomes above that of the median voter, elites in unequal societies are unlikely to allow a democratic transition because it would result in expropriation of their wealth. In the Ansell and Samuels (2010) approach, autocratic elites do not fear redistribution under democracy, but rising economic elites desire democracy as a guarantee against expropriation of their wealth, leading income inequality to be associated with a higher probability of a democratic transition.

Both of these approaches focus on the role of economic policy—taxation, redistribution, and enforcement of contracts and property rights—in authoritarian politics and regime change. However, they do not allow for the structure of the economy itself to be a function of authoritarian politics and economic policy. In the account of Acemoglu and Robinson (2006, 262-264), for example, authoritarian governments' capabilities in this regard are limited to setting a tax rate which leads the middle classes and the poor masses to have a lower utility from revolution than from continued authoritarianism. However, dictators cannot influence the pre-tax income distribution in a country, which is determined by factor ownership and is homogeneous within groups and across sectors (ibid., 290-291). Boix is sensitive to the difficulties of empirically assessing the simultaneous relationship between inequality and regime type and therefore looks only at democratic transitions in his cross-national empirical analysis (Boix, 2003, 71-75). However, in doing so he rules out the possibility that the distribution of income in a society is not only a function of redistribution under democracy, but of different types of authoritarian regimes which introduce policies with an impact on inequality as part of a broader strategy aimed at precluding a democratic transition. Similarly, Ansell and Samuels (2010, 8) explore the "political effects of land and income inequality" and implicitly assume that there are no inequality effects of authoritarian politics. The Ansell and Samuels (2012) model of economic development and inequality is driven by a shift from agricultural to industrial employment, but does not allow for this shift to be impacted by government policy which could, for example, increase the incomes of farmers and slow urban migration and industrialization. These sorts of assumptions are not tenable given evidence such that, as early as the late nineteenth century, undemocratic governments in continental Europe were able to mitigate the egalitarian consequences of globalization through protectionist trade policies aimed at preserving the position of landed elites and preventing democratization (Williamson, 1997, 126).

Economic theories of democratization are far from delivering a realistic depiction of the macro-economy under authoritarian governments, who have a long legacy of pervasive intervention in their economies. At the least, dictators act to avoid economic crises, because these are seen as important precursors to regime collapse (Haggard and Kaufman, 1997). In extreme cases, intervention by authoritarian regimes permeates the economy to extents only seen in democratic states during periods of existential threat (Friedman, 1962). For example, in the socialist dictatorships of the twentieth century Soviet Union and Eastern Europe, Stalinist policies of forced industrialization and collectivization in agriculture fundamentally altered the sectoral composition of the region's economies: according to Gregory and Harrison (2005, 731), the Soviet leadership from the 1930s to 1950s "attempted to control the basic direction of the economy through the level and distribution of investment". In market economies, too, authoritarian governments have been posited to be more insulated from lobbying and rent-seeking pressures, to have longer time horizons, and thus to have followed more "coherent" economic development policies than democracies (Haggard, 1990, 44-45). Thus, Brazilian economic policy allowed an initial period of inflationary growth under democracy in the 1980s but not under the previous authoritarian government, as the preferences of the military regime favored placating industrial elites rather than the working class (Haggard and Webb, 1993, 148). Clearly, undemocratic governments intervene in their economies in important and varying ways, and these interventions are a function of authoritarian politics: as Haggard and Kaufman (1997, 267) note, "... in all mixed economies the cooperation of some segments of the business elite is crucial for the stability of authoritarian rule." However, as yet these interventions, and their consequences, are under-explored in the political science literature on authoritarian regimes and democratization. Taking the feedback loop between authoritarian politics and economic policy seriously opens up a remarkably broad area of potential research for scholars of comparative authoritarianism which has the potential to revolutionize our understanding of the links between development and democracy.

6.1 Agriculture under Authoritarianism: Long-Run Effects of Policy

To focus on the specific policy area at hand, agriculture, I have shown in this dissertation that policy is set via a process which addresses immediate political threats from food producers and food consumers, and thus aims at preserving the incumbent regime. However, the long-term effects of all agricultural policies for economic and political development are not equal. By responding to the short-term political threats of farmers and food consumers, authoritarian governments shift economic incentive structures in the agricultural sector and alter the forces driving broader rural poverty prevalence, growth, rural-urban migration, and economic inequality (Timmer, 1988). Further research should look deeper into these long-term consequences and the extent to which countries become locked into distinct patterns of policy, development and regime outcomes. Figure 6.2 lays out my conception of the probable short- and long-term consequences of agricultural policy under authoritarian regimes. Figure 6.2: Flow Diagram: Threats, Agricultural Policy, Short- and Long-Term Effects



Regimes which face credible political threats from food consumers are more likely to follow policies which decrease returns to farmers, in order to provide lower food prices to urban consumers. These are the "urban biased" governments analyzed by Lipton (1975) and Bates (1981), and the economic consequences of their discriminatory policies against farmers are relatively clear. Poverty in developing countries is more prevalent in the rural areas of urban-biased regimes, and decreasing the incomes of farmers leads to disproportionately large decreases in the incomes of the poorest residents in the countryside (Senauer, 2002). By stunting growth in the agricultural sector, urban-biased policies also depress national output growth overall (Timmer, 1988). In addition, these urban-biased policies also contribute to rural-urban migration, as they increase the rural-urban income differential and thus the "push" for residents of rural areas to migrate to cities (Williamson, 1988). Higher rates of productivity and wage growth in the industrial sector compared to agriculture, combined with urban-biased policies which increase rural poverty and encourage migration to the cities, lead to increased economic inequality in a polity (Yang, 1999).

The political consequences of urban-biased policies are also relatively clear. Countries where the population is concentrated in a few large cities are prone to political instability (Smith, 2004; Wallace, 2013), and these same countries will eventually have small domestic agricultural sectors, making them dependent on international food markets and susceptible to unrest driven by price shocks on world markets (Bellemare, 2014). As I have shown in Chapter 2 above, by creating a pattern of urban migration and urbanization, authoritarian governments also create greater demands for low food prices and lock themselves into an urban-biased development trajectory. In the long run, government policies which tax the agricultural sector have a significant impact on patterns of economic development, future policy and positively affect the chances for authoritarian regime instability and collapse.

Consider, however, the rural-biased regimes to which I devote the majority of my attention in this dissertation: those regimes which face significant political threats from rural elites and which implement pro-farmer policies which increase agricultural prices. These regimes are more likely to lock their countries into a development trajectory which significantly decreases the risk of political instability and authoritarian regime collapse. By increasing the incomes of rural farmers, they mitigate poverty, slow rural-urban migration, bolster overall economic growth and decrease inequality. This list of outcomes accurately describes the main contours of the development process in Malaysia after the implementation of the pro-rural New Economic Policy in 1971 (Kuhonta, 2011). Directing resources towards the agricultural sector strengthens the positions of rural elites, who go on to demand and receive continuing government support for their interests and thus lock the country into a pro-rural development trajectory. This is, essentially, the development path taken by Germany from the passage of the protectionist tariff in 1879, which a whole generation of historians such as Gerschenkron (1943) and Rosenberg (1967) saw as so vitally important for explaining the stability of the authoritarian monarchy in their country until the First World War.

In this dissertation, I argue that agricultural policy under authoritarianism is driven by short-term political expediency and has significant effects on short-term regime stability. However, I would like to conclude my study by suggesting that the political importance of agricultural policy runs far deeper than its effects on regime durability or urban unrest in any given year. The structural transformation of an economy in the course of development is by definition a process centered on agriculture. The policy environment surrounding the sector is crucial for its transformation process. It follows logically that my findings on the determinants of agricultural policy under authoritarianism raise new and provocative questions on the nature of the development process under authoritarianism and its consequences for political change. In scholars' ongoing explorations of the link between development and democracy, we should not seek only to add to the growing list of factors, domestic and international, which moderate or drive this link. We should direct our attention also to the feedback mechanisms between regime type, policy and development. By doing so, we will uncover complex relationships which tell us much about the nature of contemporary authoritarianism and the prospects for democratization in coming decades.

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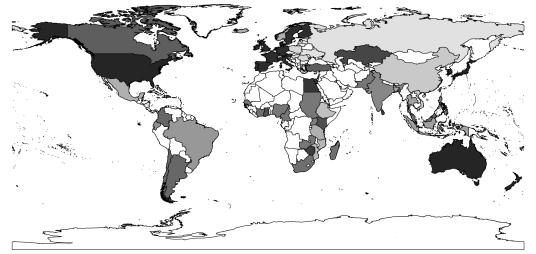
Appendix A Data Appendix

In this dissertation, I make use of several data sources which I did not make detailed descriptions of in the body of the dissertation in order to maximize the readability of the text. I give more detailed information on these data here.

A.1 World Bank Cross-National Agricultural Distortions Dataset

In Chapters 2 and 3 I analyze data on agricultural policy collected in a recently concluded World Bank research project on agricultural price distortions (Anderson and Valenzuela, 2008; Anderson and Nelgen, 2012). Building on the results and methodology of previous studies such as those by Krueger, Schiff, and Valdes (1988), this data covers all large agricultural producing states over the period 1955-2010. The coverage of the data is not evenly spread across space and time: developed economies are conspicuously over-represented due to their importance to the global agricultural trade system, and the countries of the Middle East are notably under-represented. However, the data covers all regions, includes countries which account for 92% of global population, and a wide variety of political systems are among the states represented, as illustrated by Figure A.1.

The World Bank data estimates the direct and indirect effects of domestic government policy on the price incentives faced by farmers and food consumers. Policies which are included include tariffs and trade measures, producer and consumer price distorting measures, exchange rate policy, distortions to intermediate input prices and post-farmgate costs such as those imposed by state marketing monopolies (Anderson et al., 2008). The variables in the dataset measure policy by relating domestic prices to world market prices for over seventy products (NRA and CTE), and also summarize aggregate national policy for each country-year in measures which are production- and consumption-weighted to capture the total effects of agricultural policy within a given economy (RRA and CTE). The key variables are as follows: Figure A.1: Coverage of Anderson and Valenzuela (2008) World Bank dataset on agricultural distortions



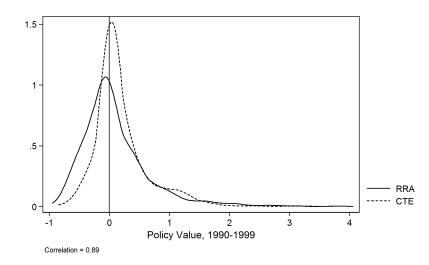
Darker shades of grey indicate a greater number of country-years included in the dataset. Countries filled with white are not included in the dataset. The maximum number of country-years is fifty-three, the minimum is six.

Source: Anderson and Valenzuela (2008); Anderson and Nelgen (2012) data matched by the author to GIS shapefile.

- 1. *Nominal Rate of Assistance* (NRA), the proportion by which domestic *producer* prices are above (or below if negative) border prices of like products.
- 2. Consumer Tax Equivalent (CTE), the proportion by which domestic consumer prices are above (or below if negative) the international prices of like products.
- 3. *Relative Rate of Assistance* (RRA) to total farm output, the proportion by which agricultural output prices are increased (or decreased if negative) relative to non-agricultural output prices.

All these variables can logically vary between negative one (prices are reduced to zero) and any positive value (by which percentage prices are increased). For example, if a country's RRA value in a given year is 0.5, government policy increases producer prices by fifty percent. If the same country's CTE value in the same year is -0.5, it decreases consumer prices by fifty percent. It is worth noting that this is an unlikely combination of policies, because it leaves the government paying a very large 'wedge' or difference between producer and consumer prices. On the whole, governments avoid placing themselves in this situation and the RRA and CTE variables are highly correlated in the World Bank dataset as depicted in Figure A.2, as governments pass on the costs of a given policy which favors producers to consumers, and vice versa.

Figure A.2: Correlation of Producer Subsidy and Consumer Tax Variables



Source: Anderson and Valenzuela (2008); Anderson and Nelgen (2012).

The extent of government intervention in the agricultural sector varies widely across and within regions. Figure A.3 illustrates this variation on the producer side by showing the average absolute RRA from 1990-1999 for all countries included in the World Bank dataset. Darker shades of grey indicate greater distortions to prices in the agricultural sector, compared to those in the non-agricultural sector. Among developed countries, East Asian governments such as those in South Korea, Japan and Taiwan intervene very heavily in their agricultural sectors, as do Scandinavian governments and members of the European Union under the Common Agricultural Policy. Australia, New Zealand, South Africa, Canada (the "Cairns Group" of free-trading agricultural exporters at the WTO) and the United States have relatively low levels of distortions to agricultural prices. Governments in developing countries heavily distort price incentives in their agricultural sectors, particularly in Africa and South Asia, but less so in Central America and South-East Asia.

However, absolute distortions to agricultural incentives are only half the story. As Figure A.4 shows, the World Bank dataset captures policies which both increase and decrease returns to producers.¹ Here we see that governments in developed regions such as Europe and East Asia intervene in markets to *increase* prices for farmers, while governments in developing regions such as South Asia and Africa *decrease* farmers' produce prices. This is due to the 'development pattern' in which countries shift from taxation to support of agricultural producers as their average income increases, and the 'anti-comparative advantage pattern' in which protection increases when farm incomes fall relative to those in the rest

¹Of course, the same is true of distortions to consumer prices (the CTE variable), which are both increased and decreased by government policy. However, I discuss only the RRA data here for illustration.

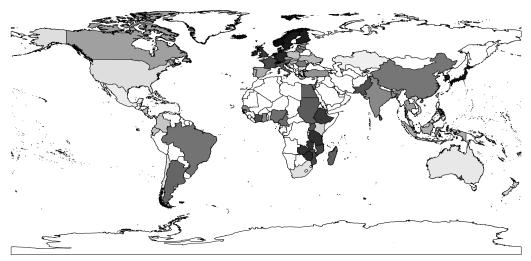


Figure A.3: Global distortions to agricultural incentives, 1990-1999

Darker shades of grey indicate greater absolute deviations from world market prices. Data is the absolute value of the total RRA.

Source: Anderson and Valenzuela (2008); Anderson and Nelgen (2012) data matched by the author to GIS shapefile.

of the economy, as outlined above (Swinnen, 2010). In addition, we see that in developed countries, where agricultural policies are more likely to involve guaranteed minimum price levels for farmers regardless of fluctuations in global markets, the variation in assistance levels is far greater than in other regions, and the variation in assistance is lowest in the regions where absolute levels of assistance are also lowest (the members of the "Cairns Group" noted above). No country provides a very high and unchanging level of assistance to farmers, but instead seeks to make up a gap between a politically-determined price and that on the world market.²

A.2 Imperial Germany

In constructing my dataset on Imperial Germany, I made primary use of government statistics published by the German Imperial Statistical Office. These are an excellent source for data on election results, voting records in the Reichstag, and commodity prices. However, for socio-economic variables, data are available only for the years when censuses were carried out, and at certain levels of geographic detail. Thus, although my analysis is of a Reichstag vote in 1879, I use data from 1882 censuses for many of my independent variables, as it is the earliest agricultural and occupational census data published by the Imperial

 $^{^{2}}$ One other notable regularity concealed by the aggregate data presented here is that import-competing sectors tend to be protected more than exportable sectors (see Swinnen (2010)).

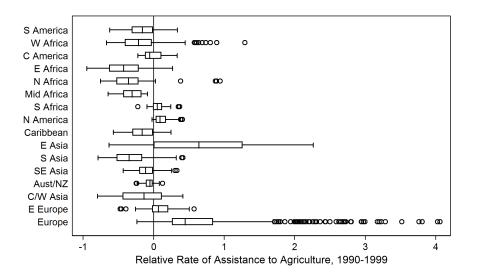


Figure A.4: Regional variation in state assistance to agriculture

Zero line indicating a neutral policy added for reference only.

Statistical Office. In addition, I sometimes use data from an administrative district level (*Verwaltungsbezirk*) rather than for each electoral district because of limitations in the published data or the resources which I was able to devote to data collection. As there are 397 electoral districts and only 82 administrative districts, administrative districts contain four or five electoral districts on average. In some cases they match exactly, while the administrative district of Breslau in Silesia contained thirteen electoral districts; more than any other. When not using government census data I follow Williamson (1997), and use the historical macroeconomic data collected from government statistics by Hoffmann (1965).

I measure confessional allegiance at the administrative district level as the percentage of the population identifying as Catholic in the 1880 population census (Statistisches Reichsamt, 1883). The proportion of Catholics in each district averaged 38% and ranged from less than one percent Catholic in the small northern Duchy of Mecklenburg-Strelitz to more than 99% Catholic in Lower Bavaria. Following Ziblatt (2008a), I measure urbanization as the percentage of workers in an electoral district who are not employed in agriculture in the 1882 occupational census data (Statistisches Reichsamt, 1884). Urbanization was on average 58% across the whole empire, and ranged from less than five percent in Oschatz, Saxony to more than 99% in Berlin. I also include measures of both landholding inequality and economic inequality. I construct a Gini coefficient of landholding inequality using agricultural census data from 1882 on the number and size of agricultural units, or individual landholdings (Statistisches Reichsamt, 1885). The mean of this measure of landholding

inequality is 0.72 across the whole of Germany, well above levels of land inequality found in contemporary OECD countries and similar to levels found in the Middle East or Latin America today (Vollrath, 2007). Although this data was published only at the provincial level (census data after 1882 was published for smaller districts), it correlates very highly (r = 0.87) with Ziblatt's (2008b) data at the electoral district level from the 1893 agricultural census, giving added weight to its reliability.

There is no existing dataset which measures economic inequality across the entire German Empire before World War One. Ziblatt (2008a) uses Grants (2005) data, covering only Prussia after 1900. This data is obviously unsuitable for analyzing national support for agricultural protection in the late 1870s. Because no suitable microdata are available, in measuring economic inequality I am compelled to follow Williamson (1997), who conceives of economic equality as the ratio of unskilled wages to total GDP per worker. The complement of this ratio gives an indication of the difference between the income of unskilled wage earners and average income. This measure of economic inequality is imperfect, but has sound theoretical underpinnings: according to Acemoglu and Robinson (2006), it is the variable determining the preferred tax rate of the working class under democracy.

To construct the inequality measure, I use 1882 census data on the size of economic sectors differentiated across fifteen occupations for each administrative district (Statistisches Reichsamt, 1884). Because no reliable regionally aggregated GDP figures for this time period exist, I combine them with Hoffmann's (1965) data on sectoral GDP per worker for all of Germany to attain district GDP per worker, making the heroic but necessary assumption that relative output across sectors was similar in the whole Empire. Finally, I compare these GDP figures to an unskilled agricultural laborer's wage from Hoffman to attain Williamson's measure of inequality. Unequal areas are characterized by a higher number of employees in high-output sectors. Thus an agricultural area in East Prussia such as Gumbinnen has a low level of inequality (0.44), while areas with a high concentration of industry and mining such as the Ruhr have the highest level of inequality (0.59). This variable has a mean of 0.5 and ranges from 0.42 in rural Lower Bavaria to 0.59 in the district of Arnsberg which contains the Ruhr and growing industrial cities of Dortmund and Bochum. It thus fits the broad trends of Grant's (2005) inequality data.

I also include direct measures of the composition of each Reichstag member's local economy. The importance of light industry is measured as the proportion of workers employed in textile production, woodworking and printing in each administrative district in 1882, while heavy industry is the proportion of workers employed in mining and metalworking in each administrative district in 1882 (Statistisches Reichsamt, 1884). The structure of the agricultural sector is captured by a variable measuring the total number of cattle counted in each administrative district in the 1883 livestock census, divided by the administrative district's total population (Kaiserliches Statistisches Amt, 1884b). The data on grain production and hectares of rye planted in the 1879-1880 season are from (Statistisches Reichsamt, 1880). I use the figures for Winter wheat, Winter rye, Summer barley. I also include a variable measuring the number of people directly involved in trade, the proportion of the population of each administrative district employed in the banking and commercial sector in 1882 (Statistisches Reichsamt, 1884).

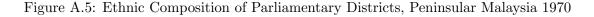
My dependent variable, the composition of the Reichstag and the voting patterns of its members, was constructed by taking the original roll-call vote on the first protectionist tariff bill in July 1879 (Deutscher Reichstag, 1879) and matching the names of the voting members to the results of the 1878 election (Statistisches Reichsamt, 1879). By combining these two sources, I created a dataset including the name of each member, which district they were elected by how they voted on the bill, and what political party they belonged to. These data were then matched to the socio-economic data on each district described above.

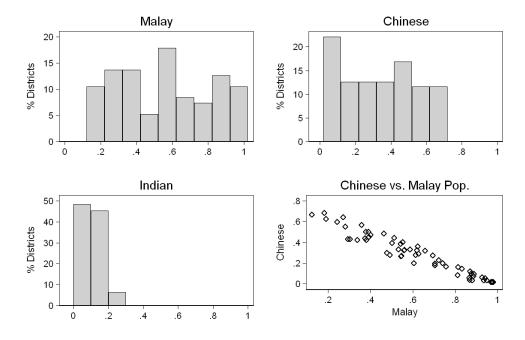
Using the members' names I was also able to look up their biographical data in the handbooks published on the Conservative, Liberal and Zentrum parties published by Haunfelder (1999, 2004, 2010) and on the Social Democratic Party by Schröder (1995). For members from the smaller regional minority party groups, I used the information contained in the Reichstag handbook for the 1878 session (Hirth, 1878, 115-259). I constructed binary variables for any member who had served in the Prussian army or who ever became a member of the Prussian House of Lords. Also, I created a variable capturing the occupation of the members thus:

- 1. Aristocratic landowners, who were described as a *Rittergutsbesitzer* or having as their occupation the administration of an estate. Titled members of the aristocracy, such as *Majoratsbesitzer*, *Fideikomissbesitzer*, *Majoratsherr* were also coded here.
- 2. A farmer who was not included in the above category.
- 3. Owners of companies who would directly benefit from the protectionist iron tariff, that is, owners of companies in the iron, steel, machine-building or railway industries.
- 4. White-collar professionals: lawyers, doctors, professors, teachers, civil servants, priests, journalists.
- 5. Businesspeople not included in category 3, workers and others.

A.3 Malaysia

To carry out my quantitative analyses of the 1969 election in Peninsular Malaysia, I compiled a demographic and economic dataset by parliamentary district from published and unpublished sources. This is the first dataset constructed which matches election results to the socio-economic characteristics of parliamentary districts during this time period, though a similar dataset was used by Pepinsky in his analysis of the 2008 election (Pepinsky, 2009). I analyzed only the districts of Peninsular Malaysia, excluding the states of Sabah and Sarawak in Borneo, because of their recent inclusion in the Federation in 1969 and the distinct nature of their politics from Peninsular Malaysia. Also, their elections were delayed after the unrest on May 13 1969, and thus are not easily comparable to the results on the Peninsula. I also excluded seats which were uncontested in the 1969 election. This left 95 parliamentary districts for analysis, which were matched to 62 administrative districts.





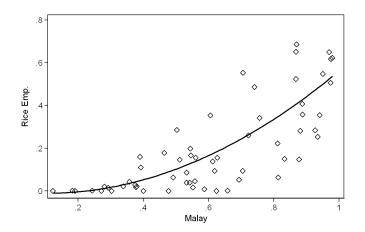
Source: (Malaysia, 1970), (Election Commission, Malaysia, 1971).

The election data I use in my case study are from the official election results published by the Malaysian Election Commission in 1970 (Election Commission, Malaysia, 1971, 52-69). These were available at the library of the University of Malaya in Kuala Lumpur. The election results are provided in Malay and English by state and national electoral districts, listing the name of the district, the names of the candidates and their party affiliation, the number of voters registered, the total number of votes cast and the number of votes received by each candidate.

Crucially, these election results include an appendix of maps illustrating the boundaries of each electoral district, by state. These allowed me to match the electoral districts to the sub-national administrative districts used in the 1970 census. I took the maps from the election reports and overlaid them on maps of the districts from the 1970 census report, and marked each electoral district with an ID to match it to an administrative district. In most

cases, administrative districts and electoral districts matched very closely: in many cases, the districts shared the same name and boundaries. Of 95 parliamentary districts included in the study, only 19 were within one administrative district alongside another parliamentary district. The most parliamentary districts included within one administrative district were 5, in the district of Kinta in Perak.

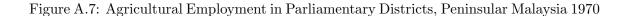
Figure A.6: Rice Sector Employment and Malay Population in Parliamentary Districts, Peninsular Malaysia 1970



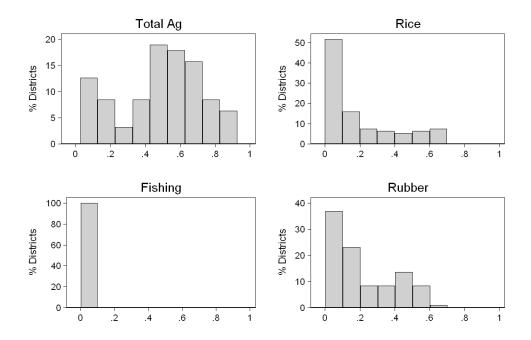
Source: (Malaysia, 1970), (Election Commission, Malaysia, 1971).

The results of the 1970 population and housing census were not published by administrative district, but data by district were available for viewing at the library of the Department of Statistics in Kuala Lumpur (Malaysia, 1970). I visited the library and photographed the relevant data to input by hand into a spreadsheet later. Separate volumes for each district contained a large number of tables, giving data on ethnicity, religion, employment and other characteristics. From each volume I used Tables 1 and 3, which give the number of people in the rural and urban sectors, the number of employed in padi (rice), logging/timber, fishing, rubber, other agriculture, manufacturing/building, commerce, transport/communication, services and other employment. These data are also given by ethnicity (Malay, Chinese, Indian, Other), the totals of which give my data on the ethnic composition of each district. The resulting data give a picture of the basic socio-economic characteristics of each district. The resulting data give a picture of the basic socio-economic characteristics of each district. In Peninsular Malaysia, a few of which are presented in Figures A.5-A.7. Unfortunately, micro-level income data or income inequality data are not available by administrative district from the 1970 population census, so I am not able to include these variables in my analysis as in the German case.

I constructed land inequality measures from the 1977 agricultural census (Khoo, 1981). The main census report lists the number of household landholdings by ten size categories



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Source: (Malaysia, 1970), (Election Commission, Malaysia, 1971).

and the total area in each size category in Table 31 (ibid., 743-750).³ These data are not reported by administrative district, unfortunately, but for the urban and rural sectors of each state. Taking the data on the number and size of household landholdings, I create a land Gini coefficient for each sector and state, in the usual manner. I plot a Lorenz curve for the actual distribution of landholdings and compare it to a line of perfect equality, as shown in Figure A.8. The area between the two curves, as a proportion of the area under the curve of equality, is the Gini coefficient.

Because Table 1 in the population census data by district indicates which proportion of the population live in urban areas—defined as towns with a population of 10,000 or above in both the population and agricultural census—I am able to weight the landholding inequality data for each district. I then match this weighted landholding inequality Gini to each electoral district along with the rest of the census data. The resulting data show that landholding inequality Gini in peninsular Malaysia in the mid-1970s was a moderate 0.44, while it was much higher in the Bornean states of Sabah and Sarawak which gives the national figure of 0.58. This was a higher landholding Gini than neighboring Thailand

 $^{^3}$ The size categories are: <1 ha, 1-2.5 ha, 2.5-5 ha, 5-7.5 ha, 7.5-10 ha, 10-12.5 ha, 12.5-15 ha, 15-20 ha, 20-25 ha, >25 ha.

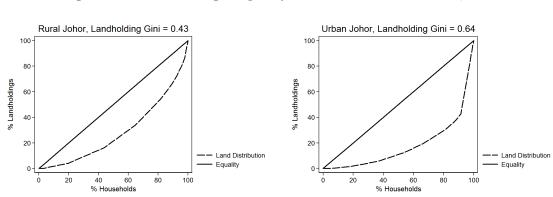


Figure A.8: Landholding Inequality in Rural and Urban Johor, 1977

Source: Table 31 in Khoo (1981).

(0.45) but around the same level as Indonesia (0.55). The mean of landholding inequality across Malaysian electoral districts was a little higher than on the peninsula as a whole, at 0.45.

Appendix B Appendix to Chapter 3

Because the estimation procedures in Chapter 3 require the simultaneous estimation of several equations, I write them out in full here.

B.1 All Failures, Urban Unrest, Elite Transitions Models

These models all include a binary indicator of regime instability, and therefore are estimated using two-stage probit least squares using the CDSIMEQ package in Stata by Keshk (2003). Apart from the regime instability variable y_2 , these models are identical and are estimated thus:¹

$$\begin{split} E[y_1(Policy)|\mathbf{X}] &= \beta_1 + \beta_2 LnGDP + \beta_3 LnAg/GDP \\ &+ \beta_4 AgGrowth + \beta 5AgLand \\ &+ \beta_6 ArableLand/Capita + \beta_7 FoodIndex \\ &+ \beta_8 Polity2 + \beta_9 LagNRA \\ &+ \beta_{10} EAsiaDummy + \beta_{11}y_2 (RegimeInstability) + \epsilon_1. \end{split}$$
(B.1)

¹ The Stata code for this estimation is: cdsimeq (nra lngdp lnaggdp aggrowth agland arableland foodindex polity2 lagnra reg10) (gwffail spline1 spline2 spline3 regyears lngdp growth foodindex oilgdp lnpopdensity popbiggestcity urbangrowth polity2 politysq gwfparty gwfmilitary).

$$\begin{aligned} Pr[y_2(RegimeInstability)|\mathbf{X}] &= \beta_1 + \beta_2 LnGDP + \beta_3 GDPGrowth \\ &+ \beta_4 FoodIndex + \beta_5 Oil/GDP \\ &+ \beta_6 LnPopDensity + \beta_7 PopinBiggestCity \\ &+ \beta_8 UrbanGrowth + \beta_9 Polity2 + \beta_{10} PolitySq \\ &+ \beta_{11} PartyRegime + \beta_{12} MilitaryRegime \\ &+ \beta_{13} Spline1 + \beta_{14} Spline2 + \beta_{15} Spline3 \\ &+ \beta_{16} YearsSinceFailure + \beta_{17} y_1(Policy) + \epsilon_2.(B.2) \end{aligned}$$

B.2 Urban Unrest (C) Model

Because the regime instability variable Urban Unrest (C) is a continuous count variable of the number of unrest events in a country's largest city in a given year, it is not estimated using two-stage probit least squares, but using regular two-stage least squares via the reg3 command in Stata and the option 2SLS. The equations are identical to those above, except the regime instability equation does not include splines:

$$E[y_{1}(Policy)|\mathbf{X}] = \beta_{1} + \beta_{2}LnGDP + \beta_{3}LnAg/GDP + \beta_{4}AgGrowth + \beta_{5}AgLand + \beta_{6}ArableLand/Capita + \beta_{7}FoodIndex + \beta_{8}Polity2 + \beta_{9}LagNRA + \beta_{10}EAsiaDummy + \beta_{11}y_{2}(UrbanUnrest) + \epsilon_{1}.$$
 (B.3)

$$E[y_{2}(UrbanUnrest)|\mathbf{X}] = \beta_{1} + \beta_{2}LnGDP + \beta_{3}GDPGrowth +\beta_{4}FoodIndex + \beta_{5}Oil/GDP +\beta_{6}LnPopDensity + \beta_{7}PopinBiggestCity +\beta_{8}UrbanGrowth + \beta_{9}Polity2 + \beta_{10}PolitySq +\beta_{11}PartyRegime + \beta_{12}MilitaryRegime +\beta_{13}y_{1}(Policy) + \epsilon_{2}.$$
(B.4)