The Effect of Electoral Uncertainty on Business Savings and Investment Choices:
Evidence from a Survey Experiment in Malawi

Shannon Colin

Senior Undergraduate Honors Thesis

Advisors: Clark Gibson and Brigitte Zimmerman

Department of Political Science

University of California, San Diego

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Abstract

Theory predicts that political uncertainty makes businesses less likely to hold risky assets and that investment patterns around elections are due to political business cycles. While empirical research has demonstrated that businesses within the formal sector do decrease investments before elections, little has been done to study the effects of political uncertainty on investment decisions in the informal sectors of developing countries. I theorize that the perception of political uncertainty around elections causes market vendors to decrease their investments until electoral uncertainty has been resolved; market vendors will choose to build savings rather than invest in their businesses. The greater the uncertainty over the outcome of the election, the less likely are investments. However, urban and politically connected market vendors are less vulnerable to electoral uncertainty, and they do not decrease investment pre-election as much. I test this theory through a survey experiment of 181 market vendors in Malawi, Africa. This context provides a "hard case" for testing this theory, as the economy of market vendors in Malawi is informal, unregulated, and highly apolitical. Despite this, the results support my hypothesis: I find that most market vendors save their money rather than invest it in the pre-election period, and that this effect increases with political uncertainty. Market vendors who were primed with high uncertainty are 10.7% less likely to invest in the pre-election period.

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Chapter 1: Introduction

What do market vendors who are excluded from the formal business sector do in the face of elections? Around the world, business owners are typically aware of upcoming elections and follow political trends as indicators for business development and growth. The economy is dictated by global and domestic political policy, and elections present a time for transition in power between parties and individuals who will change those policies that impact businesses. Much work has been done to understand corporate business decisions, including those decisions made during a context of electoral uncertainty. Corporations take note of the federal tax and budgetary plans of presidential elects and calculate their decisions strategically. When they see potential growth given electoral circumstances, they may forecast increasing sales, plan to hire more employees, or expand their facilities. When they foresee negative business implications, they may decrease capital spending, forecast decreasing revenues, or plan to decrease their employee base.

While a decrease in capital spending is typically consistent with a slow-moving economy, it indicates that businesses are inherently not growing or developing. Capital expenditures are spent to acquire or improve a business's fixed assets (i.e.: business property and equipment that can easily be turned into cash). Cash expenditures are meant to create future benefits. That said, a business's decision to decrease its capital spending based on a candidate's projected economic agenda signals negative growth trends. Likewise, a decrease in potential job openings usually implies that unemployment is stagnant or increasing, whereas a decreasing unemployment rate would indicate positive trends for job growth, business development, and economic prosperity.

While many academic endeavors and popular focus have been placed upon corporate decision-making, less work has been done to understand the informal business sector until the

last few decades. Alejandro Portes (1989) conducted a series of case studies to demonstrate for one of the first times in mainstream literature that the informal economy is actively operating within all economic contexts – it functions in developed and developing nations alike. Hernando de Soto (1989) studied the Peruvian informal sector and found that economic informality hinders upward mobility and perpetuates the legal exclusion of many individuals working in developing countries. While both of these scholars brought to light the prominence of the informal economy in many different countries, neither of them focused on the intersection between the informal sector and elections.

So what do market vendors who are excluded from the formal business sector do in the face of elections? There are a range of behaviors and decisions that might change in the uncertainty generated by an election. Market vendors may sell their assets, go on vacation, decrease or increase prices, put new items on sale, or hire new employees. If they fear looting they may change business hours during political rallies and on Election Day. Given the monetary and time constraints of this project, I chose to focus on the dependent variable of investment decisions. Because market vendors operate on a small scale within the informal sector and have less assets than larger-scale business people, I am most interested in inventory investment, or the stocking of goods ready for sale. Specifically, I ask the following research question: Do business owners decrease investments during a context of electoral uncertainty?

In order to study this topic, I conducted field research in Malawi and used a survey experiment to ask market vendors questions relating political uncertainty to investment decisions. I argue that political uncertainty leads market vendors to decrease investments until elections are over and uncertainty has been resolved. Elections create multiple forms of economic uncertainty, as each candidate implies different future outcomes for taxation,

government spending, monetary and regulatory policies. And electoral uncertainty is the

uncertainty over an election outcome (i.e.: who will win). For this purpose, I define electoral

uncertainty as the key causal variable. How do market vendors react to this electoral uncertainty?

In developing countries, the success of businesses is often tied to political connections (Pepinsky

147). Candidates buy votes from market vendors, promise preferential access to loans for votes,

and punish businesses who fail to support their party[1]. Given the political climate of uncertainty

surrounding an election with multiple candidates, it is difficult enough to interpret how market

vendors decide who to support let alone how they decide key business decisions.

I chose to conduct a study of market vendors because they are a group of business

individuals who operate outside of the formal business sector. They lack the job security, social

security, health care, and other benefits that come with legal representation and formality. They

are often unregulated, untaxed, less heavily monitored, and excluded from legal representation

within the country. Malawi is a compelling place to study the informal sector because its

economy is heavily reliant upon informal business practices. Schneider, Buehn, and Montenegro

(2010) created an index to understand the size of informal economies throughout various

countries.[2] From 1999 to 2006, Malawi's informal economy made up roughly 41.6% of the GNP,

a number huge in comparison to developed countries (20).[3]

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[1] For more information, there is a wide body of literature on vote-buying.

[2] There are many causal variables used to determine the size of any country's informal economy. These authors factor in the size of government, share of direct taxation, unemployment rate, and GDP per capita among other variables (Schneider et al. 16).

[3] In comparison, the United States has an informal economy measured at 8.6% of the GNP (Schneider et al. 24). Developing countries have greater economic activity at the informal level than OECD countries. Theory holds that an economy more reliant upon the informal business sector will be less productive than an economy with a greater number of formally integrated businesses.

The theory behind this project starts with the assumption that actors make different decisions when circumstances allow them to gather more complete information (March 154). Business decision-making is therefore hindered by political uncertainty because market vendors have limited information about the future economic state, given uncertainty over who will win elections. Awareness of political uncertainty (i.e.: information about it) will cause businesses to decrease investments until the uncertainty has been resolved by election. Politically connected businesses will not decrease investments as a result of having experienced more security, greater information, and more power prior to elections. Businesses with less access to political information will have little awareness of uncertainty and will not demonstrate a change in their decision-making process.

To test my argument, I conduct a survey among 181 randomly selected market vendors in three of Malawi's markets: Lilongwe, Blantyre, and Mitundu. The first two markets are urban and the latter is rural. An embedded survey experiment randomly assigns a vignette that conveys either high or low uncertainty in the outcome of the upcoming (May 2014) election. I ask questions before the experiment about baseline patterns of investment and savings, relevant covariates, including urban/rural location and political connections, and then inquire about the respondent's likelihood to invest in his business following the experiment's vignette.

I find strong support for three of my hypotheses. I confirm that before an election, the percentage of market vendors who invest decreases by 12%. I also find that market vendors who were primed with high uncertainty are 10.7% less likely to invest in the pre-election period. This finding demonstrates that uncertainty, above all other variables, is causal to pre-election decreases in investments. I demonstrate that urban market vendors are 11.3% less likely to invest

in their business in the pre-election period. I do not find support for my final hypothesis and instead find evidence in the opposite direction.

This work has several important policy implications about the political economy within developing countries. It provides understanding about the strategies and choices market vendors make under the context of electoral uncertainty. While official indicators of GDP do not usually account for informal sector activity (Schneider et al. 2010: 5), this project not only highlights the need to officially account for the informal sector but to study how elections impact such a prominent part of the economy. Secondly, this project demonstrates that political business cycles (or the manipulation of policy tools by incumbent presidents trying to ensure reelection) may not be the only political factors that determine economic outcomes. Market vendor investment decisions can be made in response to electoral uncertainty rather than in response to those policies implemented by presidents hoping to stimulate economic activity prior to Election Day. That said, there is a need for future research about the intersection between uncertainty over future political policies and current investment decisions within the informal sector.

The rest of my thesis will proceed as follows: Chapter 2 will give an overview of the literature on this topic and a discussion on theory and hypotheses. Chapter 3 will discuss research design. Chapter 4 will examine the statistical analysis and summarize results. Finally, Chapter 5 will conclude.

Chapter 2: Previous Approaches, Theory, and Hypotheses

Previous Approaches

The intersection between business and politics in general has a long and varied history of research.[4] Most studies fall within two general groups: the importance of business to government (i.e.: case studies on the political interests and corporations) and the role of business in the political process (i.e.: studies about public policy and business practices, campaign financing, etc.). I will focus more narrowly on the last group, examining the consequences of political uncertainty on business decisions and drawing from various literatures about political and economic uncertainty.

One group of studies addresses how political uncertainty affects economic conditions. Pastor and Veronesi (2011) assert that political uncertainty increases the risk premium in weaker economies, making people less willing to hold risky assets. They also hold that political uncertainty increases stock volatility by examining how stock prices react to political news. Pastor and Veronesi define political uncertainty as "uncertainty about the government's future policy choice" (8). While I define political uncertainty along similar lines, I extend Pastor and Veronesi's theoretical argument by testing similar variables with an experiment designed to examine causation. Pastor and Veronesi's argument is also limited to stock prices; my study adds to the literature by examining individual market vendors' decision-making process about inventory investment.

The second area of literature relevant to my research draws on economic uncertainty and business cycles. Ben Bernanke (1983) is one of the founding theoretical pieces to argue that uncertainty curbs the rate of investment because it increases the positive returns made possible by waiting for new information (96). In their book *Investment Under Uncertainty,* Dixit and

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[4] For a greater look at the full body of literature on business and politics, see Vogel (1996).

Pindyck (1994) also discuss foundational investment theories about opportunities and timing, and policy intervention.

Baker, Bloom, and Davis (2013) discuss policy-connected economic uncertainty by constructing a new measure of economic policy uncertainty (EPU). They examine how "future tax, spending, regulatory, health-care, and monetary policies" cause uncertainty in business decisions to "postpone investment, hiring, and consumption expenditure" (1). Baker et al. find that the EPU index spikes during notable presidential elections, especially during the 2010 midterm elections. This finding increases the construct validity for this project by confirming that economic uncertainty indeed increases during elections. Furthermore, they demonstrate that an increase in policy uncertainty is correlated with a decline in investment and employment, but they do not demonstrate causality. Baker, Bloom, and Davis also do more to focus on stock-market fluctuation whereas I seek to explore business decisions of market vendors who do not have stock. Lastly, their measurement for economic policy uncertainty is limited to the US context, whereas I seek to extend this measurement to a developing country perspective.

While I pose that political uncertainty drives economic uncertainty during elections, there are a few alternative explanations within the literature. Nordhaus (1975) proposes the political business cycle theory: incumbents restructure macro-level economics to better their chances of reelection, and business leaders plan investments based on these changes rather than political uncertainty. Another explanation set forth by Bertrand et al. (2006) posits that politically-connected business people shape their firm decisions and investment patterns to strengthen their connections' likelihood of reelection. I conduct tests of these alternative explanations in the survey.

Finally, the paper closest to my approach is Julio and Yook (2012), who find evidence that political uncertainty around national elections causes firms to cut investments until the electoral uncertainty is resolved. Their measure of economic uncertainty regards the "anticipation of possible negative changes in the country's macroeconomic, taxation, or monetary policies" (49). This is how I define economic uncertainty for the purposes of this project.

While Julio and Yook use observational data, I employ a research design that uses an experiment to evaluate the impact of political uncertainty differently. In order to proxy-measure political uncertainty as the independent variable, Julio and Yook use the size of the margin of victory. I extend their measurement of political uncertainty by testing a similar variable with experimental vignettes designed to examine causation.[5] Another way in which my study differs from Julio and Yook is in regard to investment timing. They examine how investment cycles react to political uncertainty over the course of a year, and I measure business decisions made in the moment political uncertainty is operationalized. One final similarity between my paper and Julio and Yook is the nature of elections used. Julio and Yook examine national elections for their scope of interest. I, too, choose to focus my study on presidential elections.[6]

Theory and Hypotheses

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[5] I present two vignettes to market vendors with high and low levels of political uncertainty. These vignettes are designed to prime a different perception of the political state when asking the market vendors key investment questions. See Chapter 3 for greater detail on research design.
[6] The May 2014 elections in Malawi are tripartite, but I chose to focus my survey questions on presidential politics given time and monetary constraints.

I argue that elections generate an uncertain business environment, and that this uncertainty makes market vendors less likely to invest in their businesses. I also propose two intermediate variables that shape the relationship between electoral uncertainty and investment: urban/rural location; and political connectedness.

Uncertainty

Why do elections depress investment? I argue it is the underlying uncertainty associated with the outcome. Individuals face a naturally uncertain world and yet still form political and economic decisions on a regular basis. Recall from earlier in this chapter two forms of uncertainty that are examined in this project: *Political uncertainty* is "uncertainty about the government's future policy choice" (Pastor and Veronesi: 8). *Economic uncertainty* is the "anticipation of possible negative changes in the country's macroeconomic, taxation, or monetary policies" (Julio and Yook: 49). Individuals operating businesses must make decisions regardless of both political and economic uncertainty.

Every decision has costs and benefits. Individuals seek to minimize the costs and maximize the benefits and so must weigh their options when determining if decisions are feasible (Cellini 2010). Because there are costs associated with gathering information (Simon 1955), individuals find information short-cuts when forming political opinions (Popkin 44). Moreover, political opinions can shape business decisions during a time of elections. While market vendors make decisions based on many apolitical economic factors, their business decisions are naturally impacted by the economic policies, actions, and attitudes of political leaders. Political opinions,

susceptible to political uncertainty, shape business decisions during contexts of economic uncertainty, and thus political uncertainty impacts business decisions.

I theorize that political uncertainty can be operationalized by giving market vendors a piece of information meant to induce the perception of uncertainty. In order to induce uncertainty, the information provided must make market vendors question their political opinions and their thoughts on future electoral outcomes. Recall that market vendors, just like any other individual, use information short-cuts to form opinions that will ultimately factor into all decision-making. Information intended to produce uncertainty must make market vendors *uncertain* about who will win an election and what their world will look like after elections. This uncertainty should make market vendors question and potentially change their decisions given new calculations of costs and benefits. For example, give market vendors information about a presidential candidate's plan to implement a repressive tax policy and then ask them about their investment strategies. Assume they previously had no knowledge of this policy. They now have information about the policy which should, in theory, help them make a more-informed decision. However, the third form of uncertainty, *electoral uncertainty,* impacts decision-making in that market vendors cannot know *who* will win an election. They must then balance their decision-making process given a) more information and b) uncertainty that cannot be solved until elections are over.

Uncertainty is the central variable to this project and is randomly assigned to measure impact on investment patterns. I experimentally vary the level of electoral uncertainty to demonstrate that it is indeed the level of uncertainty, not some other unique factors of election time, that is responsible for the fluctuation in investment. However, two other variables are

intermediately important to understanding investment decisions: urban/rural location and political connectedness.

Urban/Rural Location

Market vendors in urban areas experience greater access to political information regarding presidential politics than do rural market vendors, given the increased interactions they have with a variety of people (i.e.: newspaper salespeople, nonprofit workers, activists, and even political figures, etc). Because they have greater access to political information, urban market vendors are more aware of the political, economic, and electoral uncertainties that operate before elections than rural market vendors. Their investment decisions will be shaped by this information and uncertainty more than those decisions made by rural market vendors.

Rural market vendors have less exposure to the effects of political uncertainty given the lacking accessibility to the political information more widely distributed in urban areas. Life in rural areas is shielded from political information for a variety of reasons. To start, transportation issues hinder access to political information, as the road conditions between rural and urban areas are substandard.[7] Travel to rural areas is conducted by dirt road, a path consistently pocked by potholes and washed away by rainy seasons. In Malawi, fuel for transportation costs 28% higher than the average world price,[8] an expense too high to bear for people living in poor, rural conditions. This lack of accessibility to the capital and other urban areas keeps rural individuals in the dark about emerging political information at the national level. On a similar note, market

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[7] There is one main tarmac running throughout the capital city in Malawi. All roads leading from rural areas into the capital are dirt roads.

[8] http://www.mytravelcost.com/Malawi/gas-prices/

vendors who work in rural areas are more likely to stay there rather than expand their business ventures outwardly because the economic prospects for growth in rural areas are less promising than those in urban centers (Mead and Liedholm 68). Rural factors that hinder growth and expansion force rural market vendors to continue interacting with the same local people and politics.

This trend perpetuates the political information vacuum found within rural areas and hinders the perception of political uncertainty over electoral outcomes. In theory, rural market vendors should not decrease their investments on the basis of political uncertainty (at the national level) unless given more political information. By treating market vendors with vignettes that prime political uncertainty, I intend to increase information and induce the perception that political uncertainty does affect rural market vendors. I assume that upon receiving said information about political uncertainty, rural market vendors should act in a similar way to urban market vendors: they should decrease their investments in light of political and electoral uncertainty.

Moreover, Malawi offers an effective location for studying urban/rural differences given the prominent divide between urban and rural areas. According to the CIA World Factbook, "Landlocked Malawi ranks among the world's most densely populated and least developed countries. The economy is predominately agricultural with about 80% of the population living in rural areas" (2013). Also note that for the purposes of this project, I do not study how urban/rural location affects investment decisions in regard to differences in items for sale, or differences in how market vendors leverage their assets, or market fluctuations. To start, urban and rural markets offer very similar goods and services (see Chapter 3: Unit and Scope of Analysis), so

investment decisions are comparable across goods sold regardless of location. I do not study

leveraging or market fluctuations given the time and monetary constraints of this project.

Political Connectedness

Political connectedness changes the nature of political uncertainty by shielding politically

connected market vendors from being targeted. As one market vendor stated during an informal

interview,[9] "Politicians use their powers unfairly and will make promises to market vendors who

support them with votes. We [market vendors] fear they we will lose business property or that

we will be forced to close our shop if we don't give support." When asked about the prevalence

of this outcome, this market vendor indicated that it was a rare occasion. He had seen it happen

one time when a group of party members came to his market to chase away supporters of an

opposing party, and this created fear amongst market vendors that they would continue to lose

business if they did not join the ruling party. Another vendor from a different market indicated

having lost three customers when he refused to support the ruling party.

Even if the incidents of coercion or oppression have been rare, they have left their mark

on market vendors, who largely demonstrate an awareness about the positive effects of being

politically connected. Political uncertainty centers on the future policies of a candidate and how

those policies will impact market vendors' ability to build a profit. By forging a political

connection to the ruling party, market vendors can obtain security and confidence that their

businesses will fare well regardless of the candidate's macro-economic policies. In this way,

political connections enable a patronage system that protects market vendors from the effects of

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[9] I conducted all informal interviews while in the ground in Malawi.

political uncertainty. Theoretically, market vendors who demonstrate political connectedness should not change their investment decisions on the basis of uncertainty.

Theory Uncertainty, Urban/Rural Location, and Political Connectedness

The logic behind the theory linking these three constructs is now presented: Political uncertainty makes investment risky since market vendors do not know the future political or economic environment. That said, market vendors seek information to curb electoral uncertainty. Urban market vendors have greater access to political information and will be less likely to decrease investments given uncertainty. Information is not the only intermediate factor that changes how uncertainty will impact business decisions. Connections to the ruling political party should create a system of clientelism before elections and patronage after elections. These systems facilitate the distribution of resources from politicians to market vendors that should decrease market vendors' risks and make them less vulnerable to uncertainty.

Hypotheses

H1:   All else equal, market vendors invest less in their businesses before an election.

H2:   Market vendors who perceive the outcome of the election as highly uncertain are more likely to decrease their investments before the election.

H3:   Urban market vendors decrease their investments more before an election than do rural market vendors.

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H4:   Market vendors without political connections to the ruling party decrease

                       their investments more before an election than do market vendors with

                       political connections.

Chapter 3: Research Design

Empirical Strategy and Malawian Context

In order to test my theory, I traveled to Lilongwe, Malawi to carry out a survey experiment. I hired two Malawian research assistants to translate and enumerate the survey. We began with informal interviews (see Appendix A) of nine market vendors from four markets around Lilongwe. We conducted three interviews in the Biwi market, three in the Chezi market, one in the Lizulu market, and two in the Area 47 Sector 3 market.[10] We asked these market vendors questions about their businesses, goals, and views on the upcoming elections. The purpose of these interviews was to determine market vendor viewpoints about electoral and economic uncertainty in Malawi in order to carefully design a survey instrument.

The main empirical instrument in my thesis is an original survey. The survey was administered over the course of twelve days to 181 respondents from three market areas. Two of the market areas, Lilongwe and Blantyre, are urban locations. The third market area, Mitundu, is

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[10] We originally planned to conduct three interviews in three markets in order to ensure consistency, but upon entering Lizulu market, we discovered that most of the market vendors present that day were employees rather than owners. We interviewed one owner and decided, upon hearing this feedback, to conduct two more interviews in another market in order to gather input from owners.

rural.[11] The survey enumerator implemented a random walk pattern, starting at the first shop that sold cellular phones. After successfully interviewing this market vendor, the enumerator skipped the next two market stalls, always interviewing the third market vendor to reduce possible spillover effects. In order to take the survey, the respondents had to meet two criteria: they had to work at the market stall (and most respondents were owners) and be at least two stalls away from the previous respondent.

The first part of the survey includes the collection of covariates from every respondent including age, religion, marital status, income, political views, and market stall products and services. Then, I use a survey experiment in order to examine the effect of electoral uncertainty on business decisions. After exposing respondents to either the treatment 1 vignette (low uncertainty) or treatment 2 vignette (high electoral uncertainty), I ask them three questions to measure their business decisions. The enumerator conducted treatment randomization whilst in the field: survey respondents with ID numbers ending in odd numbers received the treatment 1 vignette, while survey respondents with ID numbers ending in even numbers received the treatment 2 vignette.

Unit and Scope of Analysis

The units of analysis in this project are individual market vendors. Market vendors are business owners who operate microbusinesses, small enterprises normally employing less than five workers.[12] Microbusinesses typically dominate business sectors in developing countries

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[11] See Unit and Scope of Analysis section for more details about market location selection.
[12] http://www.microenterpriseworks.org

because there is a lack of job opportunities for poor people in the formal business sector (Schneider et al. 2010; Walczak and Voss 2013). Twenty-three percent of the population aged 15-64 in Malawi are employed in microbusinesses (Mead and Liedholm 63). Mead and Liedholm also point out that these enterprises offer poverty alleviation by "helping a large number of very poor people become a little less poor" (70).

The scope of analysis includes 181 market vendors in three Malawian markets: two urban and one rural. The first market, Lilongwe Market, is located in the capital and largest city in Malawi. Lilongwe Market has about 110 stalls. The market opens at 6am and usually closes by 6:30pm; it typically has a constant flow of customers all day. Serving as the largest market in Lilongwe, this market has items ranging from vehicle spare parts, radios, cellphones, and timber to meat, fruits, and secondhand clothes. Some of the shops within the market include restaurants, barber shops, bars, welding shops, and internet cafes. This market serves roughly 50% of the people living in Lilongwe city.[13] There are about 300 vendors, most of them men between the ages of 18-45. People driving to this market must pay a parking fee of MK50.00 ($0.15). There are also private toilets that cost MK50.00 for use.

The second market area is in Blantyre, the industrial and commercial capital of Malawi. The Blantyre Market, similar in size and purpose to the Lilongwe Market, offers comparable goods, services, and shops to those at the Lilongwe Market (i.e.: vehicle spare parts, radios, fruits, meats, barber shops, welding shops, etc.). There are roughly 400 market vendors. While most vendors operate within the market gates, many also operate outside the gates given the limited amount of space compared to the high demand for varied goods. This market, like that in

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[13] This is a rough estimate my survey enumerator gathered from speaking with market vendors and consumers at the Lilongwe Market.

Lilongwe, serves about 50% of the people living in Blantyre. The market is open every day from 6am until 6pm, but Saturdays offer the highest traffic. The Blantyre Market also includes a parking fee of MK50.00 and a private toilet fee of MK50.00 for use.

The third market area is in Mitundu, a rural area about 20 miles outside of Lilongwe. This market operates on a normal basis but on Tuesdays and Saturdays operates what are called "market days." On these days, vendors come from surrounding cities to sell specific goods, including firewood, goats, cows, and charcoal. During the other days of the week, the Mitundu Market sells anything ranging from vehicle spare parts, oxcarts, radios, cellphones, timber, bicycle spare parts, and charcoal to fruits, and meat. There are also restaurants, barber shops, bars, welding shops, and groceries. While the market is open every day, items are sold at cheaper prices on "market days." Even still, Mitundu Market has cheaper prices than both other markets given its rural location. This market operates in a smaller space than the markets in Lilongwe and Blantyre but increases in size on "market days." There is almost equal representation between men and women among the market vendors, and most of them are aged 20-60. Most market vendors who work at Mitundu are from Mitundu, whereas the market vendors working in Lilongwe and Blantyre are from various surrounding cities. This market does not have a specific time for opening or closing and has no toilets or parking fees.

Figure 1: Photo of Mitundu Market[14]

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[14] http://nordicexplorers.blogspot.com/2013/10/to-market.html

Figure 2: Photo of Lilongwe Market[15]

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[15] http://tedchang.free.fr/SouthernAfrica/Malawi/index.html

Figure 3: Photo of Blantyre Market[16]

[16] http://ilovemalawi.blogspot.com/2008/05/some-market-scenes-in-malawi.html

Independent Variable: Political Uncertainty

Since Malawi's next set of competitive elections will take place at the local, district, and national levels in May 2014, my central independent variable is the political uncertainty over the results of the upcoming elections, referred to throughout this thesis as "electoral uncertainty." I operationalize the independent variable via survey vignettes designed to convey two levels of political uncertainty (low vs. high).[17]

The group receiving Treatment 1 was assigned *confidence* about a political outcome to respondents. The Treatment 1 group received the following vignette: *I would like you to recall the recent time when Joyce Banda forced market vendors to pay a fee of 50 MK [$0.12] to remain in business, which resulted in market vendor grievances, demonstrations, and the use of tear gas on market vendors. Pretend that it is two weeks before the election, and everybody is <u>very confident</u> that Joyce Banda will win the election. In this situation, will you change what decisions you make in your business?*

The group receiving Treatment 2, on the other hand, was assigned *uncertainty* about a political outcome to respondents. The treatment group received the following vignette: *I would like you to recall the recent time when Joyce Banda forced market vendors to pay a fee of 50 MK [$0.12] to remain in business, which resulted in market vendor grievances, demonstrations, and the use of tear gas on market vendors. Pretend that it is two weeks before the election, and people are <u>not certain</u> whether Joyce Banda will win. In this situation, will you change what decisions you make in your business?*

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[17] See Appendix B for full survey.

Both vignettes are nearly identical except that they prime respondents with different levels of political uncertainty. Both vignettes begin by asking market vendors to recall recent violence invoked upon them or other market vendors as a result of incumbent President Joyce Banda's policy. If market vendors were previously unaware of this due to information asymmetries (i.e.: in rural areas), this portion of the vignette is meant to increase the information effect about an incumbent's policy record.

The next portion of the vignettes is meant to operationalize different levels of political uncertainty in the context of elections: the first treatment assigns confidence that Joyce Banda will win the elections, and the treatment assigns uncertainty over the electoral outcome. Respondents were meant to respond to two key pieces of the vignette: 1) the political information given to them about Joyce Banda's policy toward market vendors (equal across both treatment groups) and 2) the varying levels of electoral uncertainty. It is important to note that the political information given to both groups is not demonstrable of the regular nature of politics in Malawi, a historically peaceful country. Rather, I use this political information in order to use real policy and therefore factor in construct validity. Secondly, I use this information so that market vendors can recall true events and to control for differences in information about policy. Using this information should generate a stronger effect of political uncertainty on investment decisions.

In order to effectively implement the independent variable, my enumerator completed random assignment of the treatment condition vignettes. 90 respondents were in the Treatment 1 group, and 91 respondents were in the Treatment 2 group. One might wonder if the random assignment was successfully implemented. To determine this, I conduct a Komolgorov-Smirnov (KS) test on the distributions of nine covariates across the two treatment groups. The results

appear in Table 1. Data for these covariates come from opening questions on the survey (see

Appendix B). As can be seen by examining the KS Test p-value, there is no statistically

significant difference for any of my covariates across my two treatment groups. In other words,

these two groups of subjects exposed to two treatments are very similar in make-up. This is what

we would expect given random assignment of these treatments. Of course, this list is not

exhaustive, and I could not measure all relevant covariates that might confound the relationship

between uncertainty information and investment decisions. However, one of the benefits of

randomization is that we would not expect a significant difference across treatment groups for

any covariates, either observed or unobserved, and Table 1 gives us reason to believe this

expectation is reasonable.

Table 1: Covariate Balance Across Treatment Groups in Survey Experiment

Covariate	Subjects with Treatment 2 (High Uncertainty)	Subjects with Treatment 1 (Low Uncertainty)	KS Test p-value
Female	22.1%	25.9%	0.57
Age (years)	34.1	34.8	
Religion			
Christian	80.1%	73.2%	0.27
Muslim	13.0%	17.1%	0.47
Tribe			
Chewa	41.6%	46.3%	0.55
Yao	14.3%	13.4%	0.87
Ngoni	13.0%	20.7%	0.19
Married	65.0%	72.0%	0.35
Number of Children	2.2	2.6	0.68
Market Stall Is Primary Income Source	18.2%	14.6%	0.55
Income Bracket[18]	4.6	4.5	0.84
Attended School	23.4%	15.9%	0.24

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[18] There were seven income brackets in the survey. Therefore, an average income bracket of ~4.5 represents being middle income, or having an average income of around MK 80,000 per month ($200/month).

Dependent Variable

The dependent variable construct is business investment decisions. I measure the dependent variable through questions about decisions in a survey, resulting in self-reported measures of business investment decisions. I ask survey respondents two questions about their investments before and after administering the vignette. Specifically, the questions I use to measure business investment decisions are as follows:

(1)   Now I am going to give you a scenario and ask you a question. You are selling *[observe goods sold in shop]* in your shop and it is the month before elections. When you run out of *[goods]*, will you buy more to restock or will you save the money?

(2)   Given the same scenario, what decision would you make after elections are over?

For both of these questions, respondents were able to answer "restock" or "save money." If they answered "save money," they were probed for details. Some of the common explanations were as follows: I would wait to see the outcome of the election before restocking; during or prior to elections, sales are always lower; there is a security risk associated with elections (i.e.: stealing, looting, violence, etc.). While these explanations are common responses people gave to questions about investment decisions, I do not include multiple responses in the regression analysis. Instead, as I mentioned above, I a binary investment variable, where an answer of restock was coded as 1 and an answer of save money was coded as 0. The main dependent variable in my analysis was question 1 above, the question gauging the likelihood of investment in the pre-election period.

After administering the vignettes, in addition to the two questions above I asked a question about whether or not the information about the election outcome changed their perspective on business investment decisions before the election. Respondents could answer "yes" or "no" and then give a reason for their response. Forty-one percent of respondents said that the information did change their perspective. Given the time and monetary constraints of this project, I do not have insight as to the specific mechanism linking the treatment of information to specific responses about the change in perception. However, it is interesting to consider the reasons given for "yes" answers. The common reasons associated with answering "yes" to this question were as follows: I do not like Joyce Banda's[19] policies or governance and if she wins, my business will suffer (20%); I plan to invest in another business (17%); I plan to invest more in my current business (15%); and I cannot make any serious business decisions until I know who has won (12%).

Chapter 4: Analysis, Discussion, and Results

Analysis and Discussion

Summary Statistics

To begin, it is interesting to note that no individuals refused to respond to the survey. Before beginning each survey, the enumerator assured respondents that the information they provided would not represent them as individuals and would not be linked to their name in any

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[19] Joyce Banda is the incumbent president.

way. He confirmed that all information in the survey would remain strictly confidential and that all answers would be compiled with those from 200 other respondents. He also indicated that the survey would take 30-45 minutes to complete and that there is no penalty for refusing to participate. He then asked for verbal consent and began the survey. While no respondents refused to take the survey, some respondents did not to respond to key questions (those preceding and following the treatment vignettes that capture the dependent variable of investment decisions). Fortunately, I find that the people who refused to respond to key questions are still similar to the people who did choose to respond and differ in no substantial ways.

Now I will discuss the characteristics of the respondents to this survey. Of the 181 respondents, 139 (77%) were male and 42 (23%) were female. This was what I expected given the gender inequality gap in Malawi, which is 0.573 (a high score) according to the United Nations Development Programme Human Development Reports (2013).

The average respondent age was 34 years old, with a minimum age of 19 and a maximum age of 60. This is also not surprising given the fact that. The break-down of respondent religions is listed in Table 2. The top three religions given by respondents corresponded with the most common religions within Malawi: Protestantism, Catholicism, and Muslim. Only one respondent did not offer an answer to this question. Otherwise, every respondent listed a religion and no respondent claimed to have no religion. This is unsurprising given the prominence of religiosity within Malawi, a primarily Protestant state (CIA Factbook 2013). Table 3 demonstrates the break-down of tribes listed by respondents. The majority of respondents were Chewa, corresponding to the fact that Chewa is the largest ethnic group in Malawi (CIA Factbook 2013). It is interesting to note that 13.33% of the respondents were co-ethnic with President Joyce

Banda. These respondents would be expected to respond to key questions in favor of Joyce

Banda's reelection because the majority of Malawian citizens vote across tribal lines (Ferree 6).

Table 2: Religion

Religion	Percentage of Respondents
Christian, Protestant	50.00%
Christian, Catholic	27.22%
Muslim	15.00%
Jehovah's Witness	7.22%
Rastafarian	0.56%
No Religion	0%

Table 3: Tribe

Tribe	Percentage of Respondents
Chewa	44.44%
Ngoni	16.11%
Yao	13.33%
Lomwe	10.56%
Tumbuka	5.56%
Tonga	4.44%
Sena	2.78%
Ngonde	1.67%
Mang'anja	0.56%
Lambya	0.56%

Figure 4 demonstrates the education levels of respondents. The majority of respondents (34%) completed secondary school (i.e.: high school). In terms of family dynamic, the majority of respondents (68%) were married, and 22% were single. This makes sense given the average age of respondents (34 years old) and the fact that most Malawians get married at a younger than average age (PRB Malawi Population Datasheet 4). The average number of children per respondent was 2.3, which is much lower than the national average of 5.7 (PRB Malawi Population Datasheet 1). I believe this is due to the education levels within my respondent group. According to the Population Reference Bureau, Malawians with a higher education will have less children than those women with less education (3). The majority of respondents (34%) completed secondary school (i.e.: high school), making them more likely to have less than the average number of 5.7 children per household. Even still, the PRB Malawi Population Datasheet holds that secondary education results in an average of 3.8 children per woman, and my respondents (both male and female) have an average of 2.3 children.

This figure could be low for two reasons. Firstly, the majority of my respondents are male, so it is possible that they are not accounting for the total number of children they have had but instead only the total living within their household. It is common within Malawi to only count children born within wedlock as legitimate and to negate those children born out of wedlock. It is also more common for women to take care of illegitimate children[20], so this could explain the lower than average children counted in my survey population. Secondly, this figure could be low given the effect education has on fertility rate. As education increases, so do the prospects for individual growth. Retherfod and Sewell (1989) among other scholars have demonstrated that as education goes up, family size goes down. I believe that the subjects in my study demonstrate a group of Malawians more focused on business ventures than family growth. As one market vendor said during informal interviews, "Everything is

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[20] This is based on anecdotal evidence I have gathered from Malawi. While I could not find official documentation of this trend, see http://allafrica.com/stories/201306270117.html for a similar trend in Kenya.

about business growth. I have computers and people pay to use them, but I want to expand my business. Eventually, I will offer computer games, DVDs, and installations."

Eighty-two percent of respondents stated that this market stall was the main source of income for their family. When we examine the total household income in Figure 5, the majority of respondents (38%) listed $48-$192 per month. Considering that the Malawian gross national income per capita was $320 in 2012 (World Bank), the average Malawian is only making $26 a month, which is less than the average respondent in this survey. This is a very interesting comparison, as most people would expect market vendors to be on the lower end of the income spectrum. Two explanations could account for this inflation of income levels. Firstly, the market vendors could have inflated their income in order to appear wealthier than they really are. Secondly and more likely, this sample of market vendors could just be wealthier than other market vendors based on location. While the market locations chosen are meant to represent Malawi at large, all three are in or near city centers: Lilongwe is the capital city, Mitundu is rural but is about a 20 mile drive from Lilongwe, and Blantyre is the commercial capital of Malawi. Market vendors working in and around city centers should have greater access to consumers, inputs, transportation lines, and wealth. That said, they should have a greater opportunity to expand their businesses and reach more customers.

Additionally, respondents in this survey could have made more money due to their demonstrably higher than average education levels. Figure 6 demonstrates a positive correlation between increased education levels and income, a trend that has been internationally confirmed (Houthakker 1959: 25). The correlation between education and income has implications about the opportunities had by my survey population given their geographic location. Because the majority of respondents come from urban areas, they have greater access to education.[21] Students must pay school fees even to attend public schools.

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[21] http://www.rippleafrica.org/education-in-malawi-africa/general-education-in-malawi-africa

Moreover, urban areas offer a greater number of schools, a better teacher-to-student ratio, and better conditions within schools that promote learning.

Regardless of the fact that these market vendors are wealthier than average Malawians, it is still clear to say that respondents to this survey are poor citizens. The GDP per capita (PPP) is $900, ranking Malawi 221st out of 229 countries. (CIA World Factbook 2013). When compared to neighboring African countries, Malawi still fares as one of the poorest. In terms of GDP per capita (PPP), Mozambique is $1,024, Tanzania is $ 1,601, and Zambia is $1,712 (World Bank 2013). These market vendors are therefore less wealthy than comparable market vendors in neighboring countries. When asked how much of their business was conducted outside of Malawi, only two respondents answered with 20% and one respondent answered with 20-40%. The rest of respondents indicated that none of their business was conducted outside of Malawi. Market vendors in Malawi have comparatively less opportunities for growth than those vendors in neighboring countries, and by keeping business in the country, they miss out on business expansion and increased income. Moreover, the cost of living in Malawi is high. There are small fluctuations in income, and a politically volatile climate can lead to fluctuating values of the kwacha. For this reason, I believe the market vendors in this survey think carefully about business decisions before making them.
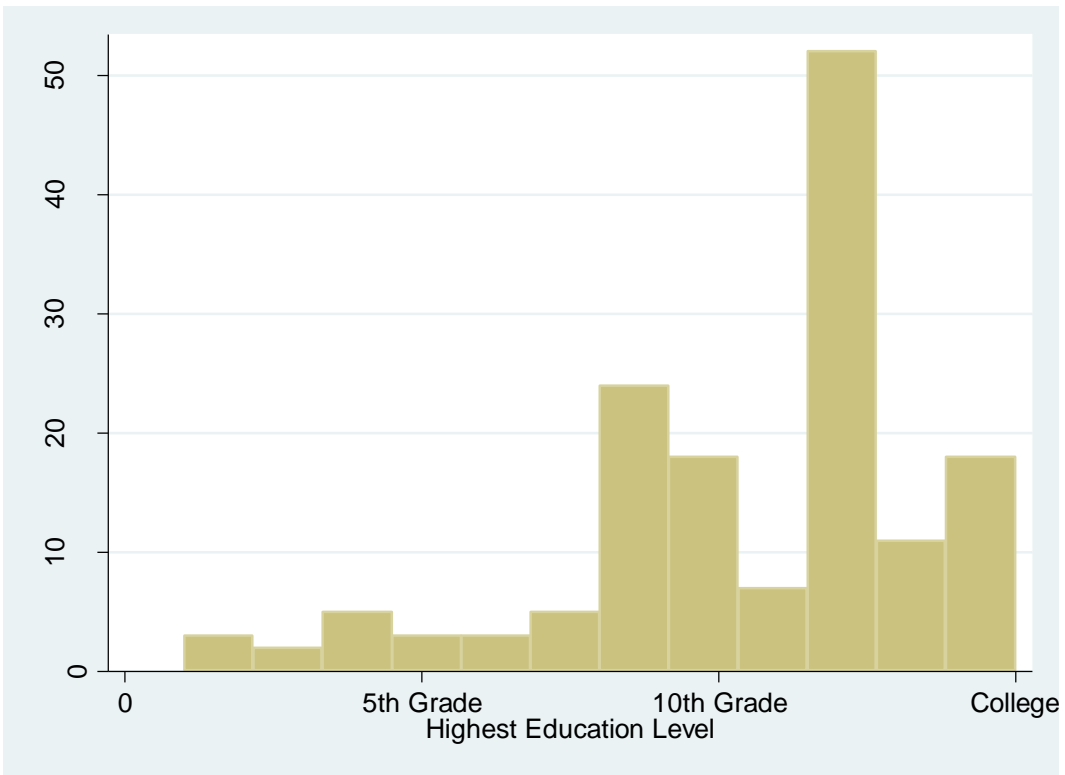
Figure 4: Education Levels
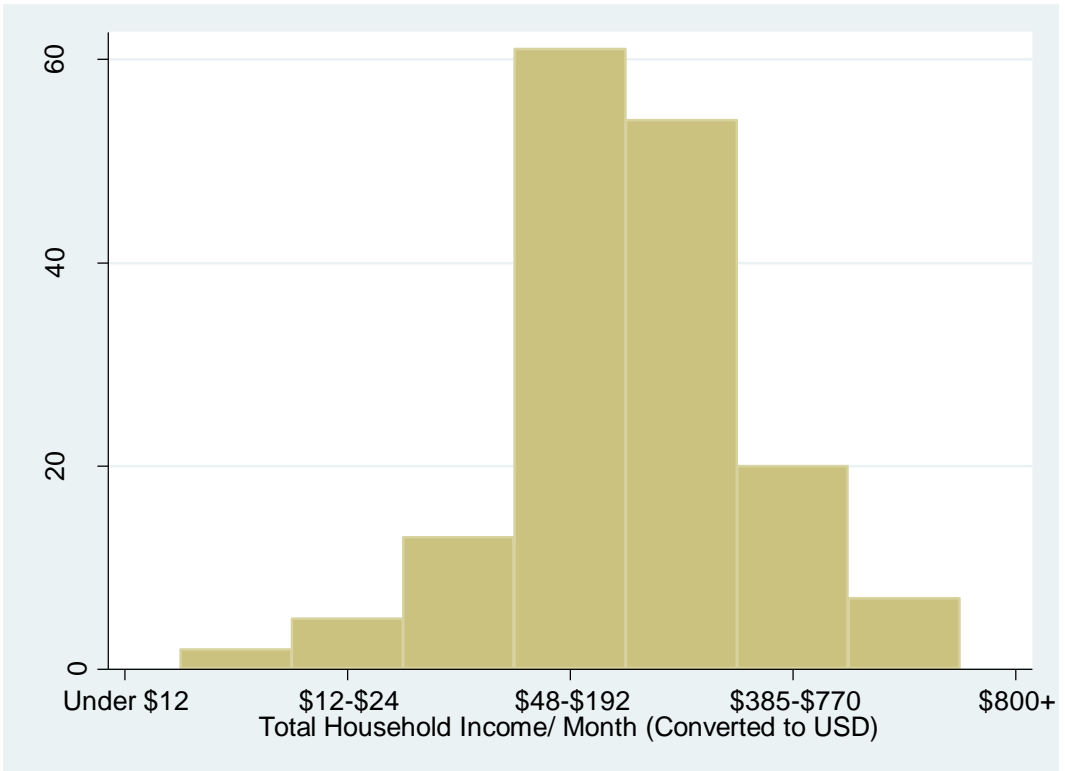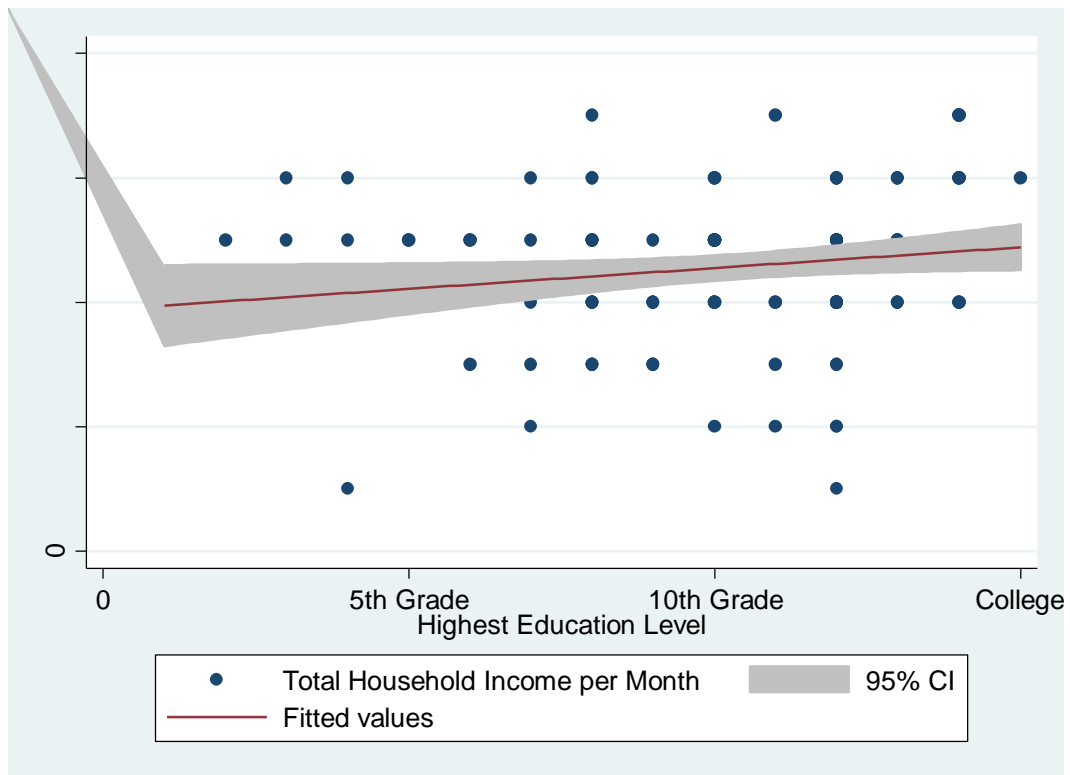
Figure 5: Total Household Income

Figure 6: Comparing Education to Income

Figure with x-axis "Highest Education Level" (labeled 0, 5th Grade, 10th Grade, College) and y-axis showing 0. Legend: Total Household Income per Month (dots), 95% CI (shaded), Fitted values (line).

Hypothesis Testing

The core hypothesis (H1) is that market vendors invest less in their businesses before an election. To test this, I conduct a difference of proportions test to examine whether the percentage of respondents who invest before elections is lower than those who invest after an election. I consider the prevalence of "restock" responses to questions 30 and 31 to provide evidence for H1.[22] This test is based on self-reported data (as all are tests in this thesis) and does not employ randomized exposure to the treatment of elections. The results are presented in Table 4. Seventy-two percent of respondents indicate restocking before elections while eight-four percent indicate restocking after elections. Overall, respondents restock

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[22] I have tested H1 using two variables: one is the rate of investment before election, and the other is the rate of investment after election. In this way, I have provided evidence that market vendors investments go up after election. What I do not capture from this test is whether there is a spike in investments directly after elections. However, I assume that post-election investment increases are recovering to non-election year levels. This assumption is based off of information gathered during the informal interviews.

at a greater rate after elections, signaling an increase in investments after elections.[23] There is strong

support for H1. Before an election, the percentage of market vendors who invest decreases by 11.7%,

which is significant at the 1% level (p=0.007). In interviews, market vendors confirmed that this

reduction in investment behavior is due to the risk associated with not knowing the outcome of an

election. As one vendor said, "You just never know what could happen before the election, so it's better

to save until it's over."

H2 predicts that market vendors who perceive the outcome of the election as highly uncertain are

more likely to decrease their investments before the election. To test this, I conduct a difference of

proportions test to examine whether receiving the treatment of high electoral uncertainty significantly

decreases the rate of investment in the pre-election period, compared to those who received the

treatment of low electoral uncertainty. The results, presented in Table 4, show strong support for H2.

Market vendors who were primed with high uncertainty are 10.7% less likely to invest in the pre-

election period (p=0.076).

H3 predicts that urban market vendors decrease their investments more before an election than

do rural market vendors. To test this hypothesis, I conduct a difference of proportions test with unequal

variance comparing the urban population to the rural population for their rates of investment in the pre-

election period. Though of course I did not randomly assign urban/rural location, I assert that the

observed and unobserved covariates that correlate with urban/rural location are less influential over

market decisions than is urban/rural location itself. There is strong support for H3. Urban market

vendors are 11.3% less likely to invest in their business in the pre-election period (p=0.081)

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[23] One concern with this test is that investing more *after* an election is not direct evidence that
respondents invest less *before* an election. Investing less before an election would be shown by a
difference between investments in a non-election year and then investments right before an election.
However, there is no formal data collected about market vendor investments in Malawi, and I was only
able to collect self-reported data during one field trip. That said, I have reason to believe through
interviews that the answers respondents gave about their investments after the election indicates similar
levels of investments in non-election years.

H4 predicts that market vendors without political connections to the ruling party decrease their investments more before an election than do market vendors with political connections. To test this hypothesis, I first construct a variable to measure political connections given responses to the following three questions:

(1) Which political party do you support?

(2) Have you ever held a position in this/any political party?

(3) Has anyone in your family ever worked in the government before?

In order to be considered politically connected, a respondent had to answer that they supported the ruling party (People's Party) and that they either held a position in the party or that someone in their family had worked for the government.[24] I then conduct a difference of proportions test with unequal variance comparing the politically connected population to the not politically connected population for their rates of investment in the pre-election period. Once again, though of course I did not randomly assign political connections, I assert that the observed and unobserved covariates that correlate with connections are less influential over market decisions than are the presence or absence of political connections. Not only is there no support for H4, there is actually strong support that the relationship is in the opposite direction. Politically connected market vendors are 25.4% less likely to invest in the pre-election period than are market vendors without political connections (p=0.0003). This finding is

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[24] This question does not limit respondents to answer with family ties to the ruling party but instead allows respondents to indicate that their family has worked for the government *at any point*. This poses a problem for my testing of H4, which predicts that market vendors with political connections to the *current ruling party* will not adjust their investments before elections. While this widening of survey responses hinders my ability to directly assess connections to the current ruling party, it should still offer a solid indication of political connectedness overall and therefore contribute effectively to the outcome of this hypothesis.

interesting and signals a need for future research. Results from the tests of all four hypotheses are presented in Table 4.

Table 4: Results of Hypothesis T-Tests

Hypothesis	Test	Result
H1: Market vendors invest less in their businesses before an election	Is there a significant decrease in the rate of investment before an election compared to after (questions 30 and 31)?	**Yes:** -11.7%***
H2: Market vendors who perceive the outcome of the election as highly uncertain are more likely to decrease their investments before the election.	Does receiving the treatment of high electoral uncertainty significantly decrease the rate of investment in the pre-election period, compared to those that received the treatment of low electoral uncertainty?	**Yes: -**10.7%*
H3: Urban market vendors decrease their investments more before an election than do rural market vendors.	Do urban market vendors report a significantly lower rates of pre-election investments than do rural market vendors?	**Yes:** -11.3%*
H4: Market vendors without political connections to the ruling party decrease their investments more before an election than do market vendors with political connections.	Do politically connected market vendors report significantly higher rates of pre-election investments compared to market vendors without political connections?	**No:** 25.5%***

*** p<0.01, ** p<0.05, * p<0.1

In addition to the t-tests, I run a regression with pre-election investment in the dependent variable. This allows me to do two things. First, given the strong support for H2 and H3, it is interesting to compare these variables in a test on their own and determine whether urban/rural location or uncertainty over electoral outcome is a stronger predictor of business investment in the pre-election period. I run a model in which I include these two variables as separate terms, and another model in which I include these two variables and an interaction between them. In addition to viewing this comparison between my variables of interest, running a regression allows me to control for other individual factors that might predict pre-election investment levels but be external to my theory.

Specifically, I control for the respondent's gender, age, religion, tribe, marital status, number of children, years of education, income bracket, and whether or not the market stall is their household's main source of income.

I expect that the significance of the effect on uncertainty should increase when I run such a regression, since I demonstrated earlier that the assignment of this treatment is uncorrelated with these covariates. Whether or not we should expect the estimate on urban/rural location to increase in significance is an open question, since we don't have a full theoretical model of the relationship between these variables. In these regressions, the dependent variable is pre-election investment (restock business materials=1; save money instead of restock=0). Since this variable is binary, I use a probit model to determine the effect of my independent variables on the likelihood of investment. A negative coefficient indicates a decrease in likelihood of investment and a positive coefficient indicates an increase in likelihood of investment. I include robust standard errors. Results are reported in Table 5.

Table 5: Regression of Investment Decisions on Uncertainty (Probit Model)

	Pre-Election Investment (yes/no)	
Treatment (High Uncertainty)	0.314	0.465
	(0.277)	(0.356)
Rural Location	0.752*	-0.548
	(0.378)	(0.460)
Rural*Uncertainty Interaction		-0.477
		(0.653)
Covariates	Yes	Yes
Observations	108	108
Pseudo R2	0.161	0.165

**Coefficients from probit model. Robust standard errors in parentheses.**
*** p<0.01, ** p<0.05, * p<0.1

Interestingly, when we include both exposure to uncertainty and rural vs. urban location, being located in a rural area washes out the effect of being primed to believe the outcome of the election is very uncertain. For ease of interpretation, I present marginal effects from this regression graphically in Figure 7. As this figure shows, all else equal, the rate of pre-election investment drops from .82 to .74

for a rural market vendor when comparing an environment with low uncertainty to high uncertainty, and

from .61 to .51 for an urban market vendor.

Despite this interesting finding, when we then include an interaction term for being located in a

rural area and being exposed to high uncertainty, the coefficients on all three independent variables are

insignificant in predicting the level of pre-election investment. There does not seem to be an interesting

sub-group effect of randomly assigned electoral uncertainty across the urban and rural market vendor

populations.

Figure 7: Rates of Investment by Electoral Uncertainty Level and Urban/Rural Location
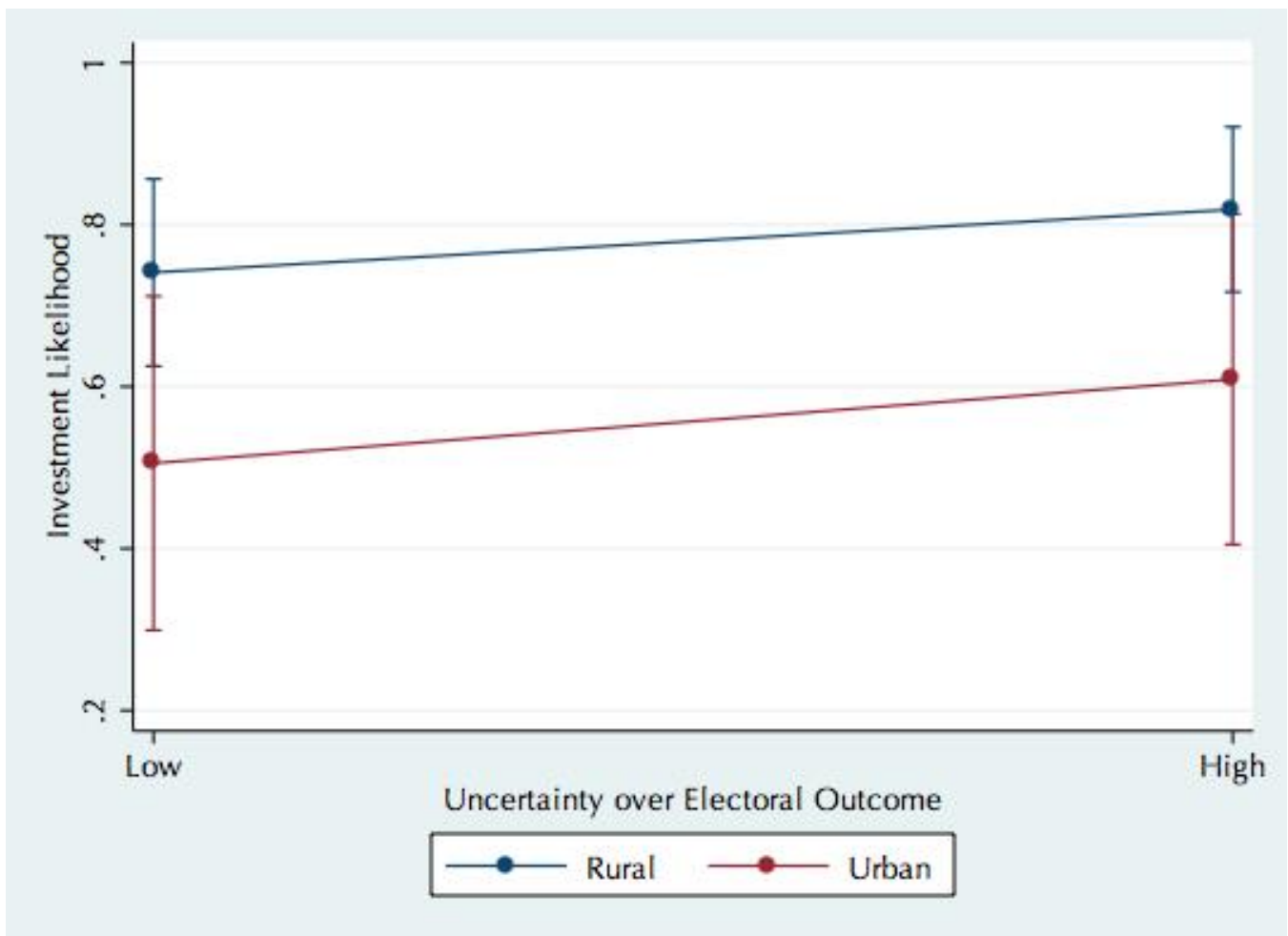
Chapter 4: Conclusion

This thesis aimed to explain the relationship between electoral uncertainty and investment decisions. After developing hypotheses that integrated uncertainty, market location, and political connectedness, the hypotheses were tested using the case of market vendors in Malawi. All data was derived from a representative survey, a survey experiment, and informal interviews. The tests show initial support for the theory that electoral uncertainty causes a decrease in pre-election investments and that this effect increases with political uncertainty.

There is strong support for hypotheses H1-H3. H1 confirms that before an election, the percentage of market vendors who invest decreases by 12%. H2, the most important implication to this paper, finds that market vendors who were primed with high uncertainty are 10.7% less likely to invest in the pre-election period. This finding demonstrates that uncertainty, above all other variables, is causal to pre-election decreases in investments. In other words, priming market vendors to perceive election outcomes to be uncertain has a direct effect on their investment decisions. H3 confirms that urban market vendors are 11.3% less likely to invest in their business in the pre-election period. H4 is the only hypothesis that does not find strong support in this study. On the contrary, there is strong support that the relationship between political connectedness and investment decisions is in the opposite direction. Politically connected market vendors are 25.4% less likely to invest in the pre-election period than are market vendors without political connections. This signals a need for future research.

Being that this project contains both two treatment groups and that there is random assignment between both of these groups, there is a strong foundation for internal validity. There are, however, a few main threats to internal validity. First, there may be selection bias, as some market vendors might not have wanted to participate without legal representation or monetary incentive. I addressed this issue by keeping the survey short and by providing a guarantee of confidentiality, indicating that this is an

undergraduate research project without any monetary incentive to any higher institution of the government.

Secondly, this project could be threatened by the social desirability bias in that respondents were asked to offer self-reported answers and may have changed their answers based on social norms or expectations. I addressed this by hiring a local Malawian research enumerator and by guaranteeing the anonymity of responses. Self-reported estimates of income, religion, political views, and business decisions should, in theory, be less sensitive when given to an enumerator who speaks the same language and shares the same cultural background and upbringing to the survey respondents.

Lastly, there may be a confounding variable issue: many societal factors besides competitive elections and political uncertainty can affect investment decisions. Some of these factors may include industry characteristics, the ideology of market vendors, access to key infrastructure, wealth, population, access to industry, or foreign aid. However, these factors should not pose a strong threat to internal validity because I randomized which market vendors received the various treatment conditions. Through randomization, for example, not all market vendors with the same ideology or the same size shop received the same treatment.

The main limit to external validity is that my project was conducted according to the context of Malawi in one given year. However, Malawi shares many similarities to other countries in which market vendors operate under uncertainty. Malawi, like most other African countries, gained independence from colonial rule in the 1960s, experienced a transition to democracy in the 1990s, and has a non-diverse economy. These factors should increase the number of varying contexts in which the experiment can be tested.

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Appendix A
Political Uncertainty and Business Decision-Making
Market Vendor Informal Interviews

Goals:
1) Gauge the prevalence, perception, and importance of political uncertainty to business leaders
2) Gauge business decisions during time of political uncertainty

Introduction:
"Thank you for taking this time to meet with me today. I would like to start off by making sure there are no misunderstandings about why I am interviewing you today. I am part of a research team from the University of California, San Diego that is working with researchers here in Malawi on a study of market vendors. We hope this interview will help us gain a deeper understanding of the decisions you and your business face before elections. We are a neutral institution, and any information you provide me is intended for market comparison. We respect your confidentiality and anonymity, and we will not write or publish the report with your name linked to anything you say today. You can also give us information "off the record," which means that we cannot report it, with or without your name. The interview should last approximately thirty minutes. Do you have any questions before we begin? *[Allow respondent to answer.]* Thank you. Let's begin."
Note: I will only do what is necessary for proper interview. If I need to buy 3 drinks for Jimmy, respondent, and myself, I will, but only as necessary.

Note: Make sure questions are directly about my research hypotheses and theory

Questions:

1) STARTER: Please tell me how you began working in this market stall.
2) STARTER: *Observe First* What product or service do you sell?
3) WALK ME THROUGH: What is your current position?
   a. What are the responsibilities and decisions you make in a given week?
4) BUSINESS TIMING: What time of year is the best for business?
5) INTERACTION: What level of interaction do you have as a business owner with political candidates or party members? *Provide explanation; ensure they understand this is a link between business and politicians, not individual with politicians*
   a. How do candidates or party members treat you and other business leaders?
   b. Do they treat you differently during election time?
6) POLITICAL UNCERTAINTY: Do you feel that with time, political tension will affect your business as elections come near? *If clarification is needed, say: It seems that the uncertainty of elections should affect your business decisions. Do you agree/Is this true?*
   a. Why is that? *Answer example: It is so hard to feed my family, and I don't know if the president will be a good person*
   b. How does political tension/uncertainty affect your business decisions?
7) BUSINESS DECISIONS: Do you change your business investments before an election? *Define investments specific to what they sell. Ex: Do you change the amount of cell phones you buy and stock before an election?*
   a. Why?
   b. Do you invest more or less?
   c. What do you invest more or less in?
8) BUSINESS DECISIONS: *Observe if business leader has other workers.* Do you hire or fire more before elections? **Jimmy says this is likely
   a. Why?
9) BUSINESS DECISIONS: Do you close your shop before elections?

    a. How soon before?
    b. Why?
    c. When do you open again?

10) BUSINESS DECISIONS: Are there any other major changes in your business before elections?
    a. What and why?

11) POLITICAL UNCERTAINTY: In your opinion, which presidential candidate is most friendly to market vendors? *Indicate candidate*
    a. How does this person show he or she is friendly?

12) POLITICAL UNCERTAINTY: In your opinion, how certain is the election outcome in Malawi? *Indicate certain/ uncertain*
    a. Which candidate is favored to win?
    b. Which candidate do you think will win?

13) POLITICAL UNCERTAINTY: Considering only what would be best for your business, what political party would you like to win the presidential election? *Indicate party*
    a. Why?

14) CLOSER: How has the Cashgate scandal affected your business?

Appendix B
Survey Instrument

Respondent ID: _____

Date: _____   Time: _____

Region: _____   District: _____

Market: _____   Gender: F / M

T/A: _____

Hello, my name is [Name of Enumerator], and I work for the University of California, San Diego. I am doing a Malawi Vendor Opinions Survey to try to understand how vendors in Malawi think about politics. The information you provide will be invaluable. Data collected from this survey will be analyzed and presented in Malawi and in other countries. The information you provide will not represent you as an individual and will not be linked to your name or other information in any way. Please rest assured that all information in this survey will remain strictly confidential. Your answers will be compiled with answers from 200 other people we are talking to. While we record basic household information for data verification purposes, this information will be expunged from the dataset before any analysis begins. Please feel free. There is no penalty for refusing to participate. If you choose to participate, the survey will take approximately 30-45 minutes. Are you willing to participate? *[Allow subject to answer.]* Thank you very much for agreeing to be part of the Malawi Vendor Opinions Survey.

Let's start with some brief questions about you and your household.

(3)   Which district do you come from? *If clarification is needed, say:* What is your district of origin?
   a.   _____
   b.   Don't know

(4)   Which district do you live in?
   a.   _____
   b.   Don't know

(5)   How long have you lived in this district?
   a.   *All of my life*   d.   *Less than 5 years*
   b.   *More than 10 years*   e.   *Don't know*
   c.   *5 to 10 years*

(6)   How old are you?
   a.   _____
   b.   Don't know

(7)   Which religious group do you belong to?
   a.   *Christian, Protestant*   d.   *Other _____*
   b.   *Christian, Catholic*   e.   *Don't know*
   c.   *Muslim*   f.   *No Religion*

(8)   What is your tribe? *Do not read these options aloud.*
   a.   *Chewa*   f.   *Sena*
   b.   *Tumbuka*   g.   *Ngonde*
   c.   *Ngoni*   h.   *Other: _____*
   d.   *Yao*   i.   *Don't know*
   e.   *Lomwe*

(9)   What is your marital status?

Colin   46

    a. Single   d. Divorced
    b. Married   e. Widowed
    c. Separated   f. Don't know

(10)   How many children do you have?
    a. Number of children: _____
    b. Don't know

(11)   Is this market stall your household's main source of income?
    a. Yes → *Go to question 12*
    b. No → *Go to question 11*
    c. Don't know

(12)   What is your main source of income? *Do not read these options aloud.*
    a. Supported by Spouse or Family
    b. Commercial Farming (some sales of product)
    c. Renting Out Properties (Landlord)
    d. Employment by a Business Respondent Does Not Own
    e. Employment by Government (excluding teachers)
    f. Employment by NGO
    g. Employment by Religious Institution
    h. Employment by Public Educational Institution
    i. Employment by Private Educational Institution
    j. Health Care Work (Doctor or Nurse)
    k. Consultant → Probe for details: _____ _____
    l. Business → Probe for details: _____ _____
    m. Retirement Pension
    n. Other: _____
    o. Don't know

(13)   What is your total household income per month? *This is a sensitive question; assure respondent that all answers are confidential and that the estimate of income doesn't have to be exact.*
    a. Under 5,000 mk / month   e. 80,000-160,000 mk / month
    b. 5,000-10,000 mk / month   f. 160,000-320,000 mk / month
    c. 10,000-20,000 mk / month   g. Over 320,000 mk / month
    d. 20,000-80,000 mk / month   h. Don't know

(14)   Have you ever attended school?
    a. Yes → *Go to question 14*
    b. No → *Go to question 15*
    c. Don't know

(15)   What was the highest level of education you completed? *Probe to determine the highest year of school <u>completed</u>.*
    a. Primary school *Standard:* _____   f. Master's
    b. Secondary school *Form:* _____   g. Ph.D.
    c. Certificate   h. Other _____
    d. Diploma   i. Don't know
    e. Degree

Now we would like to ask you some questions about politics. Please remember that your answers are confidential and that you can feel free.

(16)   Do you support any current political party?

a. Yes → *Go to question 15*
b. No → *Go to question 16*
c. Don't know

(17) Which political party do you support? *This is a sensitive question; assure respondent that all answers are confidential. Do not read these options aloud.*

a. *PP*
b. *MCP*
c. *DPP*
d. *UDF*
e. *AFORD*
f. *Other: _____*
g. *Don't know*

(18) Have you ever held a position in this/any political party?
a. Yes
b. No
c. Don't know

(19) Has anyone in your family ever worked in the government before?
a. Yes
b. No
c. Don't know

(20) Has anyone in your family ever been a traditional leader (i.e.: group village headman, village headman, or T/A) OR is anyone in your family part of the lineage to become a traditional leader?

a. Yes → *Probe. Write explanation here:* _____
_____
_____
b. No
c. Don't know

(21) What goods or services do you offer in your business? *Do not read these options aloud. Allow subject to list more than one.*

a. *Sell live animals*
b. *Sell fresh vegetables or fruit*
c. *Sell fresh meat (e.g. butchered chicken or fish)*
d. *Sell fresh grains (e.g. rice, wheat)*
e. *Sell fresh coffee or tea*
f. *Sell prepared food (e.g. chips, bread)*
g. *Sell packaged food (e.g. Rab phala, Jungle Oats)*
h. *Sell soft drinks (Coke, Fanta)*
i. *Sell alcohol drinks (Chibuku, greens)*
j. *Sell used parts for computers or radio or phone*
k. *Sell cell phones*
l. *Sell phone units*
m. *Sell used parts for cars*
n. *Sell used garments*
o. *Sell furniture*
p. *Sell fabric*
q. *Sell tobacco*
r. *Sell other consumer products (hair products, soap)*
s. *Grocery*
t. *Tailoring*
u. *Carpentry*
v. *Hair cutting/Salon*
w. *Charging station*
x. *Mechanic*
y. *Welding*
z. *Restaurant*
aa. *Bar*
bb. *Don't know*

(22) On any typical day, how many customers do you have?
a. 0-5
b. 6-10
c. 11-15
d. 16-20
e. 20-25
f. 25 or above
g. Don't know

(23) On any typical day, how much money do you make?
  a. Under 5,000 MK
  b. 5,000-10,000 MK
  c. 10,000-15,000 MK
  d. 15,000-20,000 MK
  e. 20,000-25,000 MK
  f. 25,000 MK and over

(24) Has your business grown, declined or stayed the same in the last year?
  a. Grown
  b. Declined
  c. Stayed the Same
  d. I opened shop less than a year ago
  e. Don't know

(25) What caused it to grow, decline, or stay the same?
  a. _____
  b. Don't know

(26) If you were given MK 100,000 to grow your business, what would you do with it?
  a. _____
  b. Don't know

(27) If you were given MK 100,000 to do anything you wanted, what would you do with it?
  a. _____
  b. Don't know

(28) Do you sell your goods or services outside of Malawi? hy
  a. Yes → Where do you sell them? _____
  b. No → *If no, skip to question 28*

(29) How much of your business is outside Malawi?
  a. Less than 20%
  b. 20-40%
  c. 40-60%
  d. 60-80%
  e. 80-100%
  f. Don't know

(30) Which candidate do you think will win for president? *You can circle more than one.*
  a. Joyce Banda
  b. Atupele Muluzi
  c. Lazarus Chakwera
  d. Peter Mutharika
  e. Other: _____
  f. Don't know

(31)   Does the uncertainty of the outcome of the election change what decisions you make in your business?
    a. Yes → Why?

        _____

    b. No
    c. Don't know

(32)   Now I am going to give you a scenario and ask you a question. You are selling *[observe goods sold in shop]* in your shop and it is the month before elections. When you run out of *[goods]*, will you buy more to restock or will you save the money?
    a. Restock
    b. Save money → Why?

        _____

    c. Don't know

(33)   Given the same scenario, what decision would you make after elections are over?
    a. Restock
    b. Save money → Why?

        _____

    c. Don't know

SURVEY EXPERIMENT:
Read questions 32-34 to those with IDs ending in 1,3,5,7, or 9:
(34)   *Vignette (Treatment 1)* I would like you to recall the recent time when Joyce Banda forced market vendors to pay a fee of 50 MK to remain in business, which resulted in market vendor grievances, demonstrations, and the use of tear gas on market vendors. Pretend that it is two weeks before the election, and everybody is very confident that Joyce Banda will win the election. In this situation, will you change what decisions you make in your business?
    a. Yes → Why?

        _____

    b. No
    c. Don't know

(35)   I am going to give you the same scenario I asked you a minute ago. You are selling *[observe goods sold in shop]* in your shop and it is the month before elections. People are very confident Joyce Banda will win. When you run out of *[goods]*, will you buy more to restock or will you save the money?
    a. Restock
    b. Save money → Probe:

        _____

    c. Don't know

(36)   Given the same scenario, what decision would you make after elections are over?
    a. Restock
    b. Save money → Probe:

        _____

    c. Don't know

Read questions 35-37 to those with IDs ending in 0,2,4,6, or 8:

(37)   *Vignette (Treatment 2)* I would like you to recall the recent time when Joyce Banda forced market vendors to pay a fee of 50 MK to remain in business, which resulted in market vendor grievances, demonstrations, and the use of tear gas on market vendors. Pretend that it is two weeks before the election, and people are <u>not certain</u> whether Joyce Banda will win. In this situation, will you change what decisions you make in your business?
   a.   Yes → Why?
   _____
   b.   No
   c.   Don't know

(38)   I am going to give you the same scenario I asked you a minute ago. You are selling *[observe goods sold in shop]* in your shop and it is the month before elections. People are <u>not certain</u> whether Joyce Banda will win. When you run out of *[goods]*, will you buy more to restock or will you save the money?
   a.   Restock
   b.   Save money → Probe:
   _____
   c.   Don't know

(39)   Given the same scenario, what decision would you make after elections are over?
   a.   Restock
   b.   Save money → Probe:
   _____
   c.   Don't know

We have reached the end of the survey. Thank you once again for your time and effort in assisting us with this research.