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Political Attitudes under Repression: Evidence from North Korean Refugees

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Abstract

What do citizens of highly repressive regimes think about their governments? How do they respond to high levels of repression? This paper addresses these questions by examining the political attitudes of North Korean refugees. Unsurprisingly the evaluations of regime performance are negative, and there is some evidence that they are becoming more so, even among the core political class and government or party workers. While the sample marginally overrepresents groups with the most negative evaluation of the regime, multivariate analysis is used to generate projections of the views of the wider population; this exercise indicates that that the null hypothesis that the refugees accurately represent the views of the resident population cannot be rejected at the 95 percent level. However the survey also shows that the barriers to effective communication and collective action remain high; repression works to deter political activity. Partly due to economic exigency, partly due to repression, private defiance of the government takes the form of “everyday forms of resistance,” such as listening to foreign media and engaging in market activities. Although not overtly political, these actions have long-term political consequences.

Keywords: North Korea, refugees, preference falsification, information cascades, unification

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North Korea is probably the most repressive regime extant, scoring at the absolute bottom on all standard measures with respect to regime type, political and civil liberties, and human rights. In addition to the denial of freedoms typical of many authoritarian regimes, North Korea exhibits a number of peculiar political characteristics including an extraordinary propaganda machine and extremely tight control over the flow of information from foreign sources that might call the official worldview into question. At least until recently, the state socialist organization of the economy also provided a powerful tool for monitoring and controlling the lives of its citizens. A detailed classification of the population according to perceived political loyalty has been used to allocate education, jobs, and other social benefits through employment.¹

The coercive apparatus is large. The regime maintains a vast network of political prison camps that hold perhaps 100,000 to 200,000 political prisoners and an even larger network of lower-level labor training camps that have been used to punish a widening set of crimes against the state (Hawk 2003, KINU 2009, Haggard and Noland 2009a). There are numerous eyewitness accounts of public executions and other forms of brutality (Amnesty International 2004, KINU 2009, Korean Bar Association 2009).

Precisely because of their repressiveness, it is extremely difficult to study the politics of such systems: what citizens really think and how—and if—they engage in behavior that might be considered political. Yet we also know that public sentiment can turn against apparently unshakable dictatorships with amazing velocity, as small oppositions swell into overwhelming majorities. Individuals may harbor very adverse views of the regime, but engage in “preference falsification,” and similarly lack information on the true attitudes of others. As a result, they are effectively constrained to silence by threats of coercion. Once groups start to reveal their

¹ The share deemed reliable is relatively small, on the order of one-quarter of the population, with a core elite of perhaps 200,000, or roughly one percent of the population (Foster-Carter 1994, Hunter 1999, Armstrong 2002).
disaffection, others can be emboldened to do the same. Such “information cascades” help explain sharp political turning points, such as the collapse of the communist regimes of Eastern Europe (Kuran 1989, 1995a, 1995b; Lohmann 1994; and Bikhchandani, Hirshleifer, and Welch 1998 for a review).

The repertoire of the citizenry in the face of extreme repression is by no means limited to a choice between quiescence and overt manifestations of disaffection. In a very different context, James C. Scott (1985) drew attention to what he called “everyday forms of peasant resistance,” such as shirking or the destruction of elite property. The retreat from the state sector into the market or other forms of private activity constitutes a parallel set of activities in a state socialist system. These activities can also reveal information that challenges official narratives, and can provide a public space beyond the reach of the state.

A famine in the mid-1990s greatly accelerated the development of North Korea’s informal economy. As the state proved unable to play its traditional role as a provider of food, households fended for themselves. Government, party, and military entities as well as work units pursued a variety of coping behaviors including foraging, unauthorized movement, barter, and eventually monetized trade to secure food. The marketization that began with food gradually encompassed a broader range of household goods, and local government and party officials and enterprise managers even engaged in what might be called “wholesale” gray market activities.

With the economy marketizing beyond state control, the government initiated a number of policy changes beginning in 1998 that decriminalized some of the coping practices that had developed in the previous decade (Noland 2000, 2004; Haggard and Noland 2007). These changes culminated in a major reform package in 2002.

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2 Estimates vary widely, but the most sober academic research suggests that between 1994 and 1998, a famine killed perhaps 600,000 to 1 million people, or roughly 3 to 5 percent of the precrisis population (Haggard and Noland 2007).
But these coping strategies had deep political implications. Market activity pulled individuals out of the state sector, denying the regime both labor effort and tax revenue. More importantly, market activity proved difficult to monitor and created a private sphere in which information and even organizational constraints were relaxed. Insecure with respect to the domestic political as well as economic implications of economic change, the regime began to reverse the earlier reforms beginning in 2005. Nonetheless, the reassertion of the state did not succeed in stamping out the market, but rather only generated new strategies of evasion.

Given the closed nature of the regime, it has been difficult if not impossible to secure first-hand knowledge of what North Koreans think about the regime, how those attitudes have changed over time, and whether changed attitudes might be matched with changed political behavior. However, refugee surveys provide a means of testing a number of propositions about citizen attitudes and behavior in highly repressive settings, including the extent of “everyday forms of resistance.” In this paper, we address these questions by drawing on an original survey of 300 North Korean refugees living in South Korea undertaken in November 2008.

As is well known, refugees may not be a good barometer of political attitudes in their home countries for two interrelated reasons. First, having undertaken the extremely risky effort to leave their countries, they may hold distinctively negative views of the incumbent regime that are unrepresentative of the remaining resident population. From the White Russians who emigrated to Paris following the revolution to the Miami Cubans of the present day, refugees’ views of politics have been colored by particular resentments; unobserved (and perhaps unobservable) individual-level characteristics that make them unrepresentative. Second, refugee populations may also be unrepresentative in a demographic sense. For example, people from certain regions or occupations may be overrepresented in the refugee community.
However, these selection problems may be somewhat less intractable than is frequently thought. There is evidence that the demographic profile of those who have left North Korea and landed in the south may be more similar to their compatriots than is often thought. Early defectors from North Korea were typically elites—higher-ranking party or military personnel—many of whom took strongly ideological positions vis-à-vis the north. Over time, the demographics of the refugee population have shifted dramatically, and now include an ample representation of workers and farmers and those with only basic education. Moreover, the issue of a demographically unrepresentative sample can be addressed ex post through the application of multivariate statistical techniques, which can even be used to generate estimates of the views of the underlying population.

The selection problem with respect to individual-level characteristics that might generate unusual aversion to the regime can also be addressed, albeit imperfectly. We can control ex post for a variety of experiential factors that might influence attitudes, such as incarceration or ill-treatment at the hands of authorities.

The paper begins with an overview of the sample before turning to the evolution of North Korean political attitudes. Not surprisingly, negative evaluations of the regime are widely shared across the refugee population, and there is even some evidence that members of the core political class and government and party workers are particularly disaffected. However, it is possible to combine our regression results with national level demographic data to derive estimated “approval ratings” for the population as a whole; this exercise cannot reject the null hypothesis that the attitudes of the underlying population are congruent with those of the refugees.

We do not have true panel data, but we exploit the timing of refugees’ exit to gain some insight to changes in political views over time. Evaluations of the regime appear to be getting
more negative over time. We find evidence of a declining hold of ideology as well. Although those who departed earlier were more willing to entertain the view that the country’s problems were due to foreigners, respondents who left later were more likely to hold the government accountable. Disaffection appears to be closely related not only with poor overall performance, but with corruption and abuse of office. Respondents also favored radical solutions; the preference for outright unification far outstripped those supporting reformist “third way” options.

Following an analysis of attitudes, we turn to the prospects that these adverse views of the regime might be communicated. We find the barriers to such communication are high; even among this highly disaffected share of the population, ability to communicate disaffection appears low. The scope for overt political activity remains even more limited.

However, there is evidence of an increasing willingness to defy government through everyday forms of resistance, such as listening to foreign media. We also show that there is a relative constant willingness to engage in clandestine economic activities that are corrosive of the state’s grip, and that these activities may be associated with a greater propensity to communicate adverse information. Indeed, some evidence suggests that the expansion of the repressive apparatus in response to these changes may contribute to politicizing the populace.

Sample Characteristics

The results reported in this paper are drawn from a survey of 300 North Korean refugees living in South Korea conducted in November 2008. The sample mirrors what is known about the refugee community resident in South Korea: the overwhelming majority of the sample is prime age adults, with just over half between the ages of 35 and 50; the majority are women (63
percent).\(^3\) Residents of the northeast provinces are overrepresented, as has been the case with previous surveys conducted in both China and South Korea (cf. Robinson et al. 1999, 2001a, 2001b; Lee et al. 2001; Chon et al. 2007; Lee 2007; Kim and Song 2008; Lee et al. 2008; Chang, Haggard, and Noland 2009a, 2009b). Most respondents were from North Hamgyong province (50 percent), followed by South Hamgyong province (15 percent), two provinces in the far northeast of the country. This distribution of responses actually makes these provinces somewhat less overrepresented than in earlier surveys, but these provinces do nonetheless account for only about 23 percent of the current North Korean population (United Nations Statistics Division 2010).\(^4\)

North Korea’s mandatory education includes a year of kindergarten, four years of primary school and a six-year middle school; at that point (age 15–16), students come to the end of mandatory education or are channeled into technical school (2–3 years), college (4 years) or university (4–6 years), and from the latter on to postgraduate studies. In our sample, fully 61 percent reported having only a middle-school education, approximately equivalent to graduating from high school. Another 15 percent reported that they had technical school training with 21 percent having college training. It is impossible to say whether this distribution of educational attainment belies North Korean claims about the extent (not to mention quality) of education, but it is nonetheless revealing.\(^5\)

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\(^3\) It should be noted that the refugee community in South Korea may not be representative of all those who have left North Korea. For example, an earlier survey, conducted in China, found that men and women were represented in roughly equal numbers (Chang, Haggard, and Noland 2009b).

\(^4\) There are two main reasons for the overrepresentation of the northeast provinces: these rustbelt areas were by consensus the worst affected by the famine, and their geographical proximity to China makes egress easier relative to other parts of North Korea.

\(^5\) A question about the education of the respondents’ father suggests at least some increase in educational attainment over time: 17 percent report that their father’s had only an elementary education, compared to less than 2 percent of the respondents in the sample.
The occupational status of the respondents is complicated somewhat by the large number of women in the sample; 17 percent of respondents report that they are housewives. If we look only at those in the economically active population—excluding housewives, students, and retirees (73 respondents, or just under one quarter of the sample)—the largest category among those in the workforce is laborers (40 percent), followed by government (19 percent), merchants (8 percent, with nearly two thirds of those women) and professionals, farmers, office workers, soldiers, and others (each with between 5 and 7 percent). The pattern of responses is highly correlated with those to a question about the respondent’s father’s occupation, suggesting little occupational mobility, with laborer fathers (41 percent) and government-employed fathers (22 percent) the two dominant categories, and little intergenerational movement across categories.

The North Korean regime has conducted a succession of classification exercises, dividing the population into a category of reliable supporters, the basic masses, and the “impure class”; these are commonly called the “core” (haek-sim-gun-jung), “wavering” (gibon-gye-cheung), and “hostile” (gyo-yang-dae-sang) classes respectively, and family background is a key determinant of life in North Korea. In our sample, the bulk of respondents were categorized as “wavering” (62 percent) with 11 percent hostile and 14 percent reporting that they did not know. Nonetheless, 14 percent reported being in the “core” group, suggesting that even privileged

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6 The small share of farmers in the sample is unusual compared to past surveys. However, 14 percent responded that their work unit was a state farm or cooperative and in answer to a different question, 133 respondents—44 percent of the full sample—answered that they worked on a state farm or collective. A closer inspection of this group reveals that 54 of them, just over 40 percent, self-identify as “laborers.” For our purposes, it is useful to separate out this entire group as “state farm or collective employees,” even though they reflect a variety of different occupational categories (in addition to farmers and workers, this group includes 34 housewives, 11 administrative staff [professional, government, office worker/teacher], 6 merchants, 6 students, 2 soldiers and 2 “other”). Because of their involvement in state farms and collectives and their probable rural location, we would expect them to constitute a distinct group.

7 “Core” supporters of the government, including party members, enjoy educational and employment preferences, are allowed to live in better-off areas, and have greater access to food and other material goods. Those with a “hostile” or disloyal profile, such as relatives of people who collaborated with the Japanese during the Japanese occupation, landowners, or those who went south during the Korean War, are subjected to a number of disadvantages, assigned to the worst schools, jobs, and localities, and sometimes wind up in labor camps.
political status did not provide benefits adequate to deter highly risky migration. There is some evidence of a cross-generational downward drift in status, though the classification of respondents is statistically indistinguishable from that of the fathers. Taken as a whole, these indicators depict a relatively immobile society, though it is also possible that the relatively low education levels, and lack of occupational or political mobility, reflects the stunted opportunities for those who took the risk to migrate, including as a result of their political status.

A final set of demographic variables of importance are the dates when respondents left North Korea, how much time they spent abroad before coming to South Korea, and how much time they have spent in South Korea. The date of exit is crucial in methodological terms, because it determines the relevant time frame for all of our retrospective questions, which ask about conditions at the time they left North Korea.

There is ample variation in the sample in this regard. With respect to time of departure, we have an adequate number of respondents to divide the sample in multiple ways. For some purposes it is useful to split the sample into respondents who left North Korea before and after the 2002 reforms. These two groups are almost exactly even in size. For other questions, a four-period breakdown is employed: the prereform group is divided into two: a “famine era” group (those leaving in 1998 or before, roughly 25 percent of the sample); and a “post-famine” group (1999–2002, again 25 percent); a “reform era” group (those leaving between 2003–05, 35 percent of the sample); and a “retrenchment era” group (2006 and after, 15 percent).

Duration outside North Korea, particularly time in South Korea, may also be important in shaping attitudes and perceptions.\(^8\) Those with the perspective of a long time as a refugee in a

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\(^8\) By subtracting the date they left North Korea from the date they arrived in the south, we can also tell how long respondents spent as refugees in third countries. The sample confirms the difficulties of getting from North Korea to South Korea: the modal response was two years and the median three, but nearly 30 percent of respondents spent more than five years abroad before getting to South Korea.
third country or as a resident of South Korea may view North Korea very differently because of the tribulations of being a refugee (particularly in China) or socialization to alternative views of the country (particularly in South Korea).

**Political Attitudes: Perceptions of Regime Performance and Accountability**

The motives of refugees for leaving North Korea have been highly contested in recent years. Chinese authorities, in particular, have deployed the argument that North Koreans in China are “economic migrants” rather than genuine refugees, an argument of dubious legal merit. Yet given the fact that economic conditions are so adverse, it is not surprising that more than half of the sample (57 percent) reported economic conditions as their primary motivation for leaving the country. Nonetheless, this was followed by political freedom (27 percent), fear (8 percent), and religious freedom (1 percent). The share citing these political motives is much higher than in an earlier survey of North Korean refugees conducted in China in 2004–05 (Chang, Haggard, Noland 2009a, 2009b). Changing attitudes over time appear to be one reason for this difference: the percentage citing political motives rises monotonically across the four eras of departure, spiking in the most recent retrenchment phase, providing some explanation for the larger share of politically motivated refugees in the more recent survey.

We conducted simple tests to identify the demographic and experiential correlates of those citing political motives for leaving. There is little evidence that this pattern of responses reflects either the amount of time spent outside North Korea or in South Korea; it does not appear to be a function of “socialization.” Apart from those classified as politically hostile or

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9 Refugees enjoy their status as a result of legitimate fear of persecution upon return to their country of origin. There can be little question that such fears pertain in the case of North Korea. See Kurlantzick and Mason 2006.
having been detained by the political police (*bo-wi-bu*), respondents identifying political reasons for departure are disproportionately college educated and from Pyongyang—in short members of the elite (table 1).

In order to gauge the sources of disaffection with the regime, respondents were presented with a series of statements about the performance of the North Korean government and asked to indicate their agreement at the time they departed the country running on a scale of 1–5 (1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree):

- “Kim Jong-il’s regime is improving” (REGIME),

and for those who left North Korea after the economic reforms of 2002:

- “As a result of the economic reform I was better off” (BETTER OFF).

The first statement (REGIME) is a straightforward assessment of overall political and economic conditions. BETTER OFF is the Reaganesque bottom line: are you personally better off after the reforms than you were before? By dividing the sample into four eras of departure, we can trace out how contemporary attitudes have changed over time, if at all.\(^\text{10}\) As shown in figures 1 and 2, the respondents’ overall appraisal of North Korean regime performance is very negative. On average, nearly 87 percent of the respondents disagreed or strongly disagreed with the statement

\(^{10}\) It is possible that the respondents’ perceptions were shaped by information that was contemporaneous with the administration of the survey. However, it is a plausible assumption that their impressions were shaped predominantly by conditions at the time they left; these were their last first-hand experiences with the country and as in the case of table 1, their responses do not appear to correlate either with time spent outside of North Korea or time spent in South Korea.
that the Kim Jong-il regime was getting better. When broken down by era of departure, the respondents who left during the post-famine period (1999–2002) held the most negative views, those leaving during the most recent, retrenchment period (2006–08), held the least unfavorable views, though even among this group, 81 percent of the respondents disagreed or strongly disagreed with the statement that the regime was improving.

Following the famine the North Korean economy began a slow, uneven recovery, and if anything, the respondents might be expected to misattribute the improvement in overall economic conditions beginning in 1998 to piecemeal reforms. The negativity of those who left during the famine or even its immediate aftermath is understandable; the continued negativity of those who left after the economy began to recover and reforms were enacted is more intriguing. Most of the post-2002 departure respondents (56 percent) disagreed with the statement that they had been made better off by the reforms, though almost a quarter of the sample (24 percent) agreed or strongly agreed with the statement (figure 2). The negative findings with respect to economic performance were associated with widespread perceptions of rising materialism (92 percent), corruption (87 percent), and inequality (84 percent) (Haggard and Noland 2010a). The state’s attempt to reassert control after 2005 only appeared to exacerbate these tendencies: in the retrenchment era subsample, 93 percent of the respondents reported a need to pay bribes to engage in market activities.

Given the negative evaluations on these issues (and additional performance indicators not reported for the sake of brevity), it is important to gauge the extent to which respondents believed that the poor performance was the result of government actions. The respondents increasingly hold the North Korean government accountable for these adverse developments, with the share placing primary responsibility on the North Korean government at more than 95
percent in the post-retrenchment subsample (figure 3). The share citing the policies of foreign
governments as responsible for their predicament falls steadily from 18 percent among the
famine era leavers, to 4 percent in the retrenchment era group.

In order to probe more deeply into respondents’ views of the state, they were asked their
perceptions of the most effective pathway to both increased status and income. When asked the
best way to get ahead in North Korea, officialdom (including both government and party)
trumped either the military or engaging in business, with more than 70 percent of the respondents
citing it in all sample periods (figure 4). The share citing “engaging in business” more than
doubled from 8 percent among respondents departing in the famine era to 18 percent for those
leaving in the post-2002, however, with this shift coming almost completely at the expense of
joining the military. While the military as an institution may be of rising influence in North
Korea, the large army conscripts and requires lengthy service and low-level soldiers appear to be
treated badly.

When asked “what is the easiest way to make money in North Korea: work hard at
assigned job; engage in market activities; engage in corrupt or criminal activities; none of the
above,” the most frequent response was that engaging in market activities was the easiest way to
make money. Moreover, a steadily increasing share—approaching 30 percent in the post-2002
cohort—saw corruption and criminality as the most lucrative career path (figure 5). There is no
sense that fidelity is rewarded; only a small—and falling—share (a single respondent in the post-
2002 subsample) reported that working hard at your assigned job yielded fruit.

We also posed a question on trends in the overall level of repressiveness of the system
(“Government has put more restrictions on its citizens” [RESTRICT] [figure 6]). The share
agreeing or strongly agreeing that the government is increasing restrictions on the citizenry remained relatively constant at 55 to 65 percent of the respondents across all four subsamples.

Read in conjunction, these answers about repression and the sources of power and wealth provide interesting insight into political perceptions of the North Korean regime. Employment in state organs is desirable, but business and corruption are the paths to riches. These answers suggest strongly that official position is not valuable because merit or diligence is rewarded, but because the repressive power of the state enables corruption or criminal rent extraction.

What solutions to these problems do respondents favor? They were first asked which alternative most accurately represented their views while in North Korea: maintenance of the North Korean government; installation of a new non-Kim Il-sungist government; unification with South Korea; or don’t know/none of the above. They were then posed the same alternatives asking what they believed now and what they believed the preferences of other people whom they knew in North Korea were. Given their overwhelmingly negative perceptions of the current North Korean regime, a preference for unification is implicitly under South Korean leadership.

Unification was supported overwhelmingly: not only was there little support for the maintenance of the status quo (only a single respondent out of 300), there was little support for “third way” solutions in which North Korea would remain independent under an alternative political regime (figure 7). Although exposure to South Korea appears to intensify these preferences at the margin, the responses are so strongly supportive of unification that it is effectively impossible to do multivariate analysis; there simply is not enough sample variation. The respondents also indicate that their own views mirror those of their peers remaining in North Korea, though obviously there is no way of judging the accuracy of this projection.
Determinants of Political Attitudes

A survey of more than 1,300 refugees conducted in China found that political attitudes were correlated with observable demographic markers (educational attainment, age, gender, and geographic origin) as well as personal experiences with the regime such as incarceration in the prison system, loss of family members during the famine, and the belief that they had not been recipients of assistance (Chang, Haggard, and Noland, 2009a). We undertake a similar exercise on the core performance measures (table 2), using a polychotomous logit specification.

The data are relatively noisy and the list of characteristics not robustly correlated with the pattern of responses is again relatively long, including the respondent’s age, gender, time spent in South Korea or third countries, and educational attainment. Not surprisingly, those in the core and wavering classes sometimes give the regime higher marks than those in the hostile class and there are some regional effects.

One surprising finding has to do with time trend. Those who left after 1998 have less positive assessments of the regime and its accomplishments than those who left during the famine. Although both cohorts experienced the deprivation of the famine years, the former cohort had at least seen improvement in economic conditions. Nonetheless, recovery from the famine did not affect overall perceptions of the regime.

11 The lack of impact of educational attainment is consistent with household economics results reported in Haggard and Noland (2010a), which showed that it was position within the society, not education, that was correlated with household economic experiences and attitudes, implicitly suggesting an economy where position was paramount and returns to human capital accumulation possibly quite low. It appears that educational attainment may be relatively unimportant in shaping political attitudes as well.

12 Respondents from the far northeast provinces of North and South Hamgyong tended to regard the regime less malignly than those from other parts of the country. This result may be due to a sample selection effect. The northeast is regarded as the region of the country most severely affected by the famine. However proximity to China also makes it easier to exit. Relative to other provinces, the profile of respondents from the northeast may include those who had less traumatic experiences than those from elsewhere, but due to the relatively lower cost of exit were able to migrate anyway.
Did the economic reforms have effects on respondents’ views of the regime? Not surprisingly, workers at state-owned enterprises (SOEs) were less likely to believe that they had been made better off by the economic reforms, while professionals and self-identified “merchants” were more likely to regard themselves as beneficiaries. But respondents involved in some forms of market-oriented activities, a category very much larger than self-identified “merchants,” were more likely to see themselves as worse off as a result of the reforms.

At first blush this might seem surprising, but two considerations might help explain the result. First, the category of people engaged in market-oriented activities includes those exploiting opportunities in the market (“opportunity entrepreneurship,” presumably some of the self-identified merchants) and those pushed into the market by the collapse of the socialist system (“necessity entrepreneurship”). The latter group includes a large share of women, who have been disproportionately shed from SOEs and played a crucial role in household welfare by supporting the family through trade, but under duress. This group might associate the reform not with new sources of market income, but with the loss of welfare that accompanied the crisis-induced reforms.

However a second possible explanation for this result is that the reforms were never really intended to unleash private activity in any case. Rather, these partial reforms were ringed with a variety of controls that reduced the ability to make a living through trade (Noland 2004).

In the introduction we noted the selection problems that necessarily affect the inferences that can be drawn from refugee surveys. However, we can control for one possible source of bias: that the raw survey responses may reflect the overweighting of some demographic groups.

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13 It is theoretically possible that rather than the demographic characteristics contributing the respondents’ views, causality runs the other direction, i.e., that bad (good) attitudes have landed the respondent in a bad (good) position. The regressions were reestimated using the respondent’s father’s political classification, occupation, and educational attainment. Usage of these instruments had no material effect on the results; these regressions are not reported here for the sake of brevity.
relative to the underlying population. Despite the fact that foregoing models have been estimated from a sample of refugees who may not mirror those of the society as a whole, it is possible to combine the coefficients reported in table 2 with national level demographic data (sources described in the appendix) to derive estimated “approval ratings” for the population as a whole. First, we convert the mean sample responses, originally scored on a 1–5 metric, to a 0–100 scale to generate a “sample approval rating.” Sample approval ratings are simply the scaled mean score of each response variable. To project the nationwide approval ratings, we predict the probability of observing each response conditional on estimated national values of each explanatory variable. The predicted probabilities sum to one. To estimate the mean response we sum the products of each score and its predicted probability, giving us a probability weighted mean response. We then convert this value to a 0–100 scale to generate the estimated nationwide approval ratings. The same procedure is applied to calculating minimum and maximum predicted probabilities of each outcome, which are estimated at the 95 percent confidence level and used to establish confidence intervals for each response estimate. The sample and projected national means, along with their 95 percent confidence intervals, are displayed in figure 8.

Unsurprisingly the estimated nationwide approval ratings are somewhat higher than the sample approval ratings, indicating that the sample marginally over-represents the most disaffected demographic groups. But these differences are not statistically significant; for both specifications the results fall easily within the 95 percent confidence limits. For none of these indicators does the projected nationwide approval rating rise above 30 percent.
From Attitudes to Behavior: Political Communication

It may not be surprising that both North Korean refugees and citizens harbor adverse attitudes about the regime or that these have gotten worse over time. Yet a crucial question for the future of the regime is the extent to which such views are communicated and become the basis for collective action. In the model of informational cascades, the political stability of the authoritarian regime is dependent on silence: on the inability of citizens to know what others are thinking and therefore to make common cause with them. Is such communication taking place?

We again presented the refugees a series of statements about their experiences in North Korea and asked that they grade their responses on a 1-5 scale (1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree). For these questions, however, we posed the questions not about the respondent’s attitudes and behavior but about “people” in North Korea. From the standpoint of political anthropology, these questions can be interpreted as a kind escalating ladder of dissent, beginning with the extent which people joke, followed by complaining, and organizing:

- “People make jokes about the government” (JOKES)
- “People speak freely about the government” (SPEAK)
- “People complain about the government” (COMPLAIN)
- “People feel they can speak freely about their opinions of Kim Jong-il” (LEADER)
- “Some people are organizing against the government” (ORGANIZING).

The shares affirming the statement that people make jokes about the government, while rising, never exceeds 45 percent in any of the subsamples, and the share supporting the statement
that people complain about the government never reaches 40 percent. Even among an unusually
disaﬀected subgroup of the population—refugees—and despite their overwhelmingly negative
assessment of the regime, less than half of the sample report that their peers joked or complained
about the government.

Kim Jong-il appears sacrosanct. Although free discussion of Kim rises steadily among
those who left the country after 1998, even among those who fled during the post-retrenchment
period, only 8 percent report that people spoke freely about Kim Jong-il. Indeed, the shares who
reported their peers speaking freely about Kim Jong-il almost precisely mirrored the shares
reporting that people were organizing against the government.

The pattern of responses for RESTRICT, JOKES, SPEAK, and COMPLAIN are reported
in table 3. (For the questions on Kim Jong-il and antiregime organizing there is not enough
sample variation in the data to support meaningful analysis.) The results again provide mild
support for the notion of greater cynicism if not outright dissent among some elite groups. Older
respondents, members of the core class, residents of the capital city Pyongyang, and those
working in party or government offices were somewhat more likely to believe both that
restrictions were increasing and that citizens were joking and speaking freely about the
government among peers.14

However, political experiences and private activities also mattered. Detention by the
political, as distinct from regular, police was associated with a greater likelihood of reporting
joking (regression 3.2) or complaining (regression 3.3) about the government among one’s peers.
Admittedly the direction of causality is debatable—it could be that the system is correctly
identifying those engaged in politically deviant behavior. Yet it could well be that contact with

14 Party membership is signiﬁcantly correlated with joking about the government with one’s peers if the share of
household income regressor is excluded from regression 3.2.
the system actually politicizes the respondent. It is notable that the minority (less than 13 percent) who reported that they had formal legal proceedings prior to incarceration had significantly more positive assessments of the regime than the majority that did not, suggesting that treatment may be shaping attitudes rather than the other way around.

An important finding for our purposes concerns the effect of the market. The share of household income derived from market sources is positively associated with perceptions of tightening restrictions and joking with peers about the government (regressions 3.1, 3.2).

Again, counterfactual projections are made in an attempt to check if overweighting particular groups in the sample have distorted the picture provided by the survey respondents. The “national sample” provides an estimate of how we would expect a draw from the underlying population might answer these questions (figure 9). As before, for two of the three indicators relating to dissent, the projected nationwide values are slightly higher than the point estimate derived from the refugee sample (i.e., the sample under-weights those perceiving higher levels of social communication), though in all three cases the null hypothesis of equality cannot be rejected at the 95 percent level. For the RESTRICT indicator, the counterfactual nationwide projection shows even wider perceptions of control, though again it falls within the 95 percent confidence interval.

**From Attitudes to Behavior: Everyday Forms of Resistance**

Answers to the question about whether peers are organizing against the government comport with a wide array of evidence on the limits of collective action in North Korea. Organizations that maintain clandestine networks within the country—which have an interest in spotlighting
anti-regime actions—have very little to report in this regard; overt anti-regime action remains sporadic at best (Haggard and Noland 2010b). The independent social organizations that played roles in political transitions in other settings—unions in Poland, the church in the Philippines—are completely absent in North Korea while the repressiveness of the regime is now thoroughly documented.

This does not mean, however, that citizens are quiescent; disaffection may be channeled into private actions that, while not overtly political, may nonetheless have longer-run implications for the stability of state socialism.

One example of such action is the willingness of citizens to access alternative sources of information that are likely to conflict with official mythology. Figure 10 reports responses to a question on access to foreign media. It is evident that the informational barrier is increasingly permeable: a rising share, a majority in the post-retrenchment period, report watching or listening to foreign media, and critically, a falling share (nil in the era of retrenchment) report having access to foreign media but declining to watch or listen. Not only is foreign media becoming more widely available, inhibitions on its consumption are declining as well. And it is foreign news media that are being consumed: when the respondents were asked to differentiate between access to and consumption of entertainment and news, the share consuming foreign news reports is almost 30 percentage points higher than the share consuming foreign entertainment products.

Moreover, we find evidence that access to information matters. Consumption of foreign media was associated with more negative assessments of the regime and its intentions. This finding is of particular policy as well as analytic significance, as it suggests the crucial role that control over information plays with respect to the effectiveness of government propaganda and
mythmaking (Lankov 2007, 2009). The availability of alternative sources of information undermines the heroic image of a workers’ paradise and threatens to unleash the information cascades that can be so destabilizing to authoritarian rule.

The consumption of foreign media is but one aspect of a much larger phenomenon of engagement in private economic activities (table 4). More than 70 percent of respondents and more than 60 percent of their spouses reported that they engaged in trading, magnitudes consistent with an earlier survey cited in Kim and Song (2008) and Lee et al. (2008). Nineteen percent of respondents (and 20 percent of spouses) report participation in “other” private activities. The respondents were also asked what share of household income came from private business activities at the time the individual left North Korea. The results are staggering (figure 11). Nearly half the sample reported that all of their income came from private business activities at the time they left North Korea and more than two-thirds—69 percent—reported that half or more of their income came from such activities. Only a handful of respondents—4 percent—reported that none of their income came from the market.

What is striking about the extent of engagement in the market is its uniformity across the sample. Regressions were estimated in two forms: ordered probits on the ordinal responses reported in figure 11, and a simple probit in which the sample was divided between those who received all their income from the market and those who received nonmarket income (table 5). As with the models of perceptions of regime performance, the list of variables not robustly correlated with the market component of family income is long.15

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15 Respondents’ sex; age; year or “era” of departure from North Korea; time in South Korea or third countries; educational attainment; residence in the capital city, Pyongyang, or in the northeastern provinces of the country; political classification; and occupation had no effect on their propensity to engage in market activity. Work unit was significant. August 3rd units, affiliates of state-owned enterprises that have statutory authority to engage in entrepreneurial activities, were more likely to earn income from the market than regular SOE workers, government or party employees, and soldiers. Agricultural cooperative or state farm workers also received less income from the market.
It is again possible to combine the coefficients reported in table 5 with national level demographic data to derive projections of involvement in the market in the wider population. The sample and projected national means, along with their 95 percent confidence intervals, are displayed in figure 12. There is little difference between the sample values and the projected nationwide results; though the projected nationwide results are a bit lower (indicating that our sample over-represents the most marketized demographic groups), but for both specifications the results fall easily within the 95 percent confidence limits.

Participation in private economic activities may have a variety of longer-run political consequences, for example, by weakening the state sector and forcing reforms on the government. Here we focus on a more direct route to politics: we asked respondents whether the market might become the locus for political activity. As the government has acted to control markets, most recently in connection to a confiscatory currency reform announced November 30, 2009, scattered news reports have emerged of incidents in which market traders, mostly women, have protested restraints on trade (Haggard and Noland 2010b).

The survey asked whether traders cooperated with each other. The share of respondents agreeing or strongly agreeing ranged from 32 percent to 42 percent across the four time periods, although with no perceptible trend. Likewise, when asked whether traders in the market were beginning to organize to protect their interests, the affirmative response rate was 28 to 29 percent in all time periods. Although this is a minority of the full sample, it is nonetheless surprising; the market may not be an altogether atomized “space,” but appears to hold at least some opportunity for cooperation and collective action. Moreover, as we saw above, there is some evidence that participation in the market is associated with the view that the regime is getting more repressive
and the perception that citizens are willing to communicate about the regime, if only through joking.

**Conclusion**

The constraints on independent collective action in authoritarian regimes and the corresponding atomization of civil society are well known. In North Korea, as in other highly repressive regimes, pervasive surveillance, a highly developed internal security and monitoring apparatus, and the liberal use of the penal system (Haggard and Noland 2009a) all serve to reduce trust in the society. Even making jokes about the government is risky, let alone complaining, disparaging the leader, or organizing against it.

If approached with appropriate caution, refugee surveys can provide insights into public opinion and behavior in authoritarian systems that substantially nuance this simple assessment that “repression works.” First, repressive regimes are able to control behavior but even a highly elaborated propaganda machine such as North Korea’s is not able to control private perceptions and political attitudes. Objective measures of the horrendous economic performance of the North Korean regime are mirrored in the extremely adverse opinions refugees have about its performance. Although we cannot completely overcome the selection problems associated with such surveys, controls for demographic and experiential markers suggest that refugee views may not be as divergent from the population’s as is often thought, suggesting that highly repressive regimes—and particularly those with poor economic performance—remain vulnerable to changes in the opportunity or information structure.
It should be stressed that all of these results pertain to a sample of refugees. One would expect this group to have negative assessments of the regime and multivariate analysis confirms that their views are more negative than those of the resident population. But at least controlling for identifiable demographic and experiential markers, these differences appears marginal; all counterfactual projections of the views of the resident population fall within the 95 percent confidence bound around the sample averages. At least on the basis of observable characteristics, it would appear that the highly negative evaluations may well represent the unarticulated views of large swaths of the North Korean public.

There is some evidence that growing politicization is correlated with membership in the core class and employment in the government, party, or military. These findings are interesting, given that these respondents occupy relatively—even substantially—favored positions. Intra-elite schisms are the Achilles’ heel of authoritarian regimes. To the extent that even relatively privileged groups are expressing discontent, it suggests either that the regime may not be as stable as is often thought or that slight perturbations could push future leaders in a more reformist direction.

A second finding concerns the limits on the ability of such regimes to deflect accountability. A common tactic of authoritarian leaders is to rally support for the government by displacing blame for poor performance onto external and internal enemies. Respondents in our survey, however, were increasingly disinclined to believe state propaganda, which has consistently stressed North Korea’s “hostile environment.” Most respondents believed that poor performance was a result of the regime’s own failings and partial reforms of the political system were rejected in favor of much more radical reforms (political unification with the south in this case).
A third set of findings has to do with political behavior. Although there is little evidence of overt political activity in North Korea, there is ample evidence not only of growing cynicism but of communication of disaffection and a growing willingness to engage in a kind of quiet exit from the system. This has occurred first and foremost by engaging in market activity and to a lesser extent by consuming alternative media that effectively challenges the regime’s narrative. With respect to the latter, there is evidence of declining inhibitions against consumption, as well as evidence that consumption of foreign media has contributed to disaffection.

A crucial issue for the future of North Korea—as for other authoritarian regimes—is the extent to which these activities might provide the basis for a more robust and independent civil society. For example, small restaurants and the provision of other services are on the one hand merely businesses. On the other hand, they provide the space for communication outside of heavily monitored official work units (Lee 2009).

Taken in conjunction, our findings underline a classic dilemma facing highly repressive regimes. On the one hand, the extraordinary repressiveness of the regime is probably a rational strategy. When authoritarian governments pursue policies that have such disastrous consequences and diverge so widely from the public interest, the only way to maintain power is through coercion and surveillance. Yet such a strategy only has the effect of making the public more alienated, thus requiring still higher levels of coercion and surveillance to prevail. The post-2005 backsliding with respect to reform appears to reveal just such a dynamic.

The second conclusion that can be drawn, however, is that loyalty to the regime is in short supply. If challenged, the leadership is not likely to find champions among the public. Campaigns to defend the regime through continued and increased sacrifice, 100-day campaigns,
and other mobilizational appeals are less and less likely to work as individuals engage in more and more extensive “everyday forms of resistance.”
Due to lack of a comprehensive and reliable data source for North Korea, the national level values used in the computation of the counterfactuals were constructed using various sources and techniques. To match our sample, data on past population were taken from the International Labor Organization’s database. Female and regional population shares were taken from United Nations Statistics Division (2010) reporting the final results of the 2008 Census of Population conducted by the Central Bureau of Statistics of Democratic People's Republic of Korea (DPRK) along with the United Nations Population Fund (UNFPA) in late 2008. Age distribution data was also taken from the United Nations Statistics Division (2010) for the calculation of the average age group of the total population. All variables were adjusted accordingly as a share of the total population between the ages of 15 and 64, the labor force age, to maintain consistency with our sample data, of which 96 percent are in that age group.

To calculate work unit values, the army and unemployed or retired were assigned the values of soldiers and economically nonactive in the Korean Statistical Information Service (KOSIS) database. The shares for “State Farm or Agricultural Cooperative,” “State-Owned Enterprise (SOE),” and “Government or Party Office” were distributed in the same proportion as estimates of agriculture, industry, and the service sector reported in Noland (2000), with SOE employment adjusted for August 3rd workers using Gey’s estimate of traders. The remaining workunit share was allotted to “other workunits”.

For the occupation variables, shares of students and soldiers were calculated from the KOSIS database. United Nation Economic and Social Council Report (2002)’s data on labor force distribution were used to assign shares for professionals and teachers, and the share of
merchants was based on an estimate of the number of traders (Gey 2004). Social class variables’
shares were calculated by averaging figures from Kim (2000) and Hunter (1999).

In calculating the sectoral dummies, the shares for “State-Owned Enterprise (SOE)” and
“Government or Party Office” were distributed in the same proportion as estimates of industry
and the service sector reported in Noland (2000), with SOE employment adjusted for August 3rd
workers using Gey’s estimate of traders. The values of soldiers were added to the “government
or party office” figure to match our “government, party office or military” sectoral dummy
variable.

To estimate the number of people who fall into the category of knowing of the food aid
program but not believing that they were recipients, we take the targeted number of beneficiaries
at the peak of the World Food Programme (WFP) (8 million, 1999–2001 per Haggard and
Noland [2007]) and apply the percentage of people who knew of the food aid program but
believed that they were not recipients derived from the refugee survey (67 percent), yielding an
estimate for this category of approximately 22 percent of the population.

To our knowledge no data exist on the total number of people incarcerated in North
Korea, much less any figures for the share who have been incarcerated at any point in their
lives. Indeed, the only data of which we are aware on the share of the population ever
incarcerated or lifetime probability of incarceration are for the United States. So as a proxy for
the share of population that have ever been detained or are currently detained, we used the
gender-specific probable percentage of African Americans, born in 2001, ever going to prison
during lifetime from the Bureau of Justice Statistics (2003)’s report, 32 percent in the case of
males, 6 percent in the case of females. (Both are less than our sample averages of 45 percent
and 29 percent, respectively.) Estimates for variables related to the specifics of detainment such
as which police force was involved were taken from the refugee survey for lack of any alternative sources. Numbers from the refugee survey were used for foreign media exposure as well. Finally, for the four variables that represent participation in private activities, the total share of the population engaged in private activities was set to 47 percent, the central estimate of national level marketization of the food economy from Haggard and Noland (2007). Estimates of the number of individuals engaged in various forms of market activity could then be constructed by assuming that the distribution of different types of activity mirrored the refugee sample.

To model current attitudes, it was assumed that residents reflected the views of those who had most recently emigrated, i.e., the post-retrenchment departure dummy was set equal to one and the dummies for other eras of departure zero.

The categorical and binary dependent variables were converted to a 0–100 scale from which the probability weighted mean responses were calculated.
REFERENCES


reports submitted by States parties under articles 16 and 17 of the Covenant Addendum; Democratic People’s Republic of Korea pp.6 and 33. (May).

Table 1. Political Motive for Departure (probit: political motive for departure= 1)

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>(1.1)</th>
<th>(1.2)</th>
</tr>
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<tr>
<td>Left North Korea: Post-famine period (1999~2002)</td>
<td>0.206</td>
<td></td>
</tr>
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<td></td>
</tr>
<tr>
<td>Left North Korea: Reform period (2003~2005)</td>
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<tr>
<td></td>
<td>(0.244)</td>
<td></td>
</tr>
<tr>
<td>Left North Korea: Retrenchment period (2006~)</td>
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<tr>
<td></td>
<td>(0.322)</td>
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<tr>
<td>Left North Korea: Post-reform (2003~)</td>
<td>0.430**</td>
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<td>(0.301)</td>
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<tr>
<td>Hometown in Pyongyang</td>
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<td>0.578*</td>
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<td>(0.304)</td>
<td>(0.301)</td>
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<td>Time spent in South Korea</td>
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<td>Detained by political (bo-wi-bu) police</td>
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<td>0.518***</td>
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<td>(0.179)</td>
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<td>(0.343)</td>
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<td></td>
<td>(0.289)</td>
<td>(0.288)</td>
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<tr>
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<td>0.827**</td>
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<tr>
<td></td>
<td>(0.364)</td>
<td>(0.361)</td>
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<tr>
<td>Worked in a government/ party office /military</td>
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<td>0.318</td>
</tr>
<tr>
<td></td>
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<td>(0.206)</td>
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<tr>
<td>Education level: College</td>
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<td>0.461**</td>
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<td>(0.193)</td>
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<td>Pseudo R-squared</td>
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<td>Log likelihood</td>
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<td>-153.2</td>
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<td>Chi-squared</td>
<td>41.33</td>
<td>41.92</td>
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</table>

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1
Table 2. Sentiments about the North Korean Government and Economy  
(Ordered Logit)

<table>
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<th></th>
<th>(2.1) REGIME</th>
<th>(2.2) BETTER OFF</th>
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<tr>
<td>Post-famine Period (1999~2002)</td>
<td>-0.775*</td>
<td></td>
</tr>
<tr>
<td>(1999~2002)</td>
<td>(0.444)</td>
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<tr>
<td>Reform Period (2003~2005)</td>
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</tr>
<tr>
<td>(2003~2005)</td>
<td>(0.412)</td>
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<tr>
<td>Retrenchment Period (2006~)</td>
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</tr>
<tr>
<td>(2006~)</td>
<td>(0.451)</td>
<td></td>
</tr>
<tr>
<td>Worked at a State Owned Enterprise at the time</td>
<td>-0.741***</td>
<td></td>
</tr>
<tr>
<td>you left North Korea</td>
<td>(0.255)</td>
<td></td>
</tr>
<tr>
<td>Hometown in Pyongyang</td>
<td>0.796</td>
<td></td>
</tr>
<tr>
<td>(0.613)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hometown in Far Northeast provinces (North and</td>
<td>0.615*</td>
<td>0.571**</td>
</tr>
<tr>
<td>South Hamgyong)</td>
<td>(0.365)</td>
<td>(0.247)</td>
</tr>
<tr>
<td>Class: Core</td>
<td>1.438***</td>
<td></td>
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<tr>
<td>(0.481)</td>
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<tr>
<td>Class: Wavering</td>
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<tr>
<td>(0.404)</td>
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<td>Class: Hostile</td>
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<tr>
<td>(0.497)</td>
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<td>Participated in Private trading</td>
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<tr>
<td>Participated in providing private services</td>
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<tr>
<td>(0.421)</td>
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<tr>
<td>Participated in other private business activities</td>
<td>-0.574*</td>
<td></td>
</tr>
<tr>
<td>(0.314)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participated in August 3rd unit activities</td>
<td>-1.135***</td>
<td></td>
</tr>
<tr>
<td>(0.352)</td>
<td></td>
<td></td>
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<tr>
<td>Occupation: Professional</td>
<td>1.358***</td>
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<tr>
<td>(0.517)</td>
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<td></td>
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<tr>
<td>Occupation: Merchant</td>
<td>1.220**</td>
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<tr>
<td>(0.493)</td>
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<tr>
<td>Watched or listened to foreign news or</td>
<td>-0.878***</td>
<td></td>
</tr>
<tr>
<td>entertainment programs including videos or DVDs</td>
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<td>Observations</td>
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<td>263</td>
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<td>Log likelihood</td>
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<td>Chi-squared</td>
<td>16.83</td>
<td>52.41</td>
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Standard errors in parentheses  
*** p<0.01, ** p<0.05, * p<0.1
Table 3. Level of Repression in North Korea  
(Ordered Logit)

<table>
<thead>
<tr>
<th></th>
<th>(3.1)</th>
<th>(3.2)</th>
<th>(3.3)</th>
<th>(3.4)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>RESTRICTIONS</td>
<td>JOKES</td>
<td>SPEAK FREELY</td>
<td>COMPLAIN</td>
</tr>
<tr>
<td>Age when they left North Korea</td>
<td>0.239** (0.105)</td>
<td>0.332*** (0.126)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1=10-19 2=20-29 3=30-39 4=40-49 5=50-59 6=60-69 7=70-79)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-reform Era (2003~)</td>
<td></td>
<td>0.783** (0.316)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Worked in a government or party office or were in the military</td>
<td>0.857** (0.365)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hometown in Pyongyang</td>
<td></td>
<td>1.112** (0.497)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hometown in Northeast provinces (Ryanggang, North &amp; South Hamgyong)</td>
<td>-1.221*** (0.306)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Class: Core</td>
<td></td>
<td>1.318** (0.585)</td>
<td>1.445*** (0.508)</td>
<td></td>
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<tr>
<td>Class: Wavering</td>
<td></td>
<td>0.747 (0.490)</td>
<td>0.566 (0.384)</td>
<td></td>
</tr>
<tr>
<td>Class: Hostile</td>
<td></td>
<td>0.962 (0.637)</td>
<td>1.444*** (0.525)</td>
<td></td>
</tr>
<tr>
<td>Occupation: Student</td>
<td>-1.096* (0.609)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Occupation: Teacher</td>
<td>-1.081* (0.587)</td>
<td></td>
<td></td>
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<tr>
<td>Occupation: Soldier</td>
<td></td>
<td></td>
<td>-1.673** (0.711)</td>
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</tr>
<tr>
<td>Detained by political police (Bo-wi-bu)</td>
<td></td>
<td>0.823*** (0.297)</td>
<td>0.562* (0.305)</td>
<td></td>
</tr>
<tr>
<td>Detained by political police only</td>
<td>-1.198*** (0.414)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Know of prison camps &amp; think they are unjust</td>
<td>0.972*** (0.311)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knew about foodaid but didn’t receive any</td>
<td>-1.381*** (0.367)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share of total income from private business activities (100 scale)</td>
<td>0.006* (0.004)</td>
<td>0.010*** (0.003)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>195</td>
<td>205</td>
<td>206</td>
<td>203</td>
</tr>
<tr>
<td>Pseudo R-squared</td>
<td>0.0769</td>
<td>0.0482</td>
<td>0.0864</td>
<td>0.0415</td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-249.7</td>
<td>-269.6</td>
<td>-184.2</td>
<td>-289.8</td>
</tr>
<tr>
<td>Chi-squared</td>
<td>41.62</td>
<td>27.30</td>
<td>34.85</td>
<td>25.10</td>
</tr>
</tbody>
</table>

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
Table 4. Engagement in Private Activities
[Shares of those who answered "yes"]

<table>
<thead>
<tr>
<th>In addition to your work duties, did you ever engage in the following activities:</th>
<th>Respondent</th>
<th>Spouse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Trading</td>
<td>70.9</td>
<td>60.2</td>
</tr>
<tr>
<td>Provision of Private Services</td>
<td>8.9</td>
<td>10.4</td>
</tr>
<tr>
<td>Other Private Business Activities</td>
<td>18.9</td>
<td>20.1</td>
</tr>
<tr>
<td>August 3 Unit</td>
<td>14.9</td>
<td>18.1</td>
</tr>
</tbody>
</table>

Table 5. Household Income Regressions

<table>
<thead>
<tr>
<th></th>
<th>(5.1) Income share from Private Business Activities (Categorical)</th>
<th>(5.2) All income is from Private Business Activities (Binary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hometown in provinces bordering China (N. Pyongan, Jagang, Ryanggang &amp; N. Hamgyong)</td>
<td>-0.339** (0.134)</td>
<td>-0.273* (0.154)</td>
</tr>
<tr>
<td>Workunit: State Owned Enterprise</td>
<td>-0.621** (0.252)</td>
<td>-0.682** (0.281)</td>
</tr>
<tr>
<td>Workunit: State Farm or Agricultural Cooperative</td>
<td>-0.606** (0.275)</td>
<td>-0.291 (0.304)</td>
</tr>
<tr>
<td>Workunit: Government or Party office</td>
<td>-0.756** (0.302)</td>
<td>-0.655* (0.342)</td>
</tr>
<tr>
<td>Workunit: Army</td>
<td>-0.797** (0.337)</td>
<td>-1.160*** (0.434)</td>
</tr>
<tr>
<td>Workunit: Unemployed or retired</td>
<td>-0.395 (0.277)</td>
<td>-0.080 (0.303)</td>
</tr>
<tr>
<td>Workunit: Other</td>
<td>-0.259 (0.252)</td>
<td>-0.133 (0.276)</td>
</tr>
<tr>
<td>Number of Observations</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>P-value</td>
<td>0.0140</td>
<td>0.00692</td>
</tr>
<tr>
<td>Chi-squared</td>
<td>17.57</td>
<td>19.44</td>
</tr>
<tr>
<td>Log Likelihood</td>
<td>-478.5</td>
<td>-197.3</td>
</tr>
<tr>
<td>Pseudo R-squared</td>
<td>0.0180</td>
<td>0.0470</td>
</tr>
</tbody>
</table>

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

Standard errors in parentheses
Figure 1. The Kim Jong Il regime is improving

- Totally Disagree
- Disagree
- Neutral
- Agree
- Totally Agree
- Unclear/Don't know

Figure 2. As a result of the reform I was better off

- Totally Disagree
- Disagree
- Neutral
- Agree
- Totally Agree
- Unclear/Don't know
Figure 3. North Korean Economy gets better or worse mainly because of:

- The policies of the North Korean government
- The policies of foreign governments
- The situation in the world economy in general
- Other/ no opinion

Figure 4. Best Way to Get Ahead in North Korea

- Become a government or party official
- Join the Army
- Engage in Business
- None of the above
Figure 7. Views on Unification

- Maintain the current government
- Have a different government but stay independent as NK
- Unify with South Korea
- None of the above/Don't know

Figure 8. Sentiments about the Government and Economy: Sample vs. National Projection

Note: Brackets display confidence intervals at the 95 percent confidence level.
**Figure 9. Level of Repression in North Korea: Sample vs. National Projection**

*RESTRICTIONS* is inverted such that a lower number equates to a more adverse assessment of the intensity of repression in this figure for comparative purposes, whereas in the actual data a higher number equates to a more adverse response. Note: Brackets display confidence intervals at the 95 percent confidence level.

**Figure 10. Access to Foreign Media**

- I watched or listened to foreign news or entertainment programs including videos or DVDs.
- I had access to foreign news or entertainment programs but did not watch.
- I did not have access to foreign news or entertainment programs.
Figure 11. Share of Total Income that came from Private Business Activities

Figure 12. Share of Total Income that came from Private Business Activities: Sample vs. National Projection

Income share from Private Business Activities (Categorical)  All income is from Private Business Activities (Binary)