

Gender in Transition: The Case of North Korea

Stephan Haggard and Marcus Noland

Abstract

This paper uses a survey of 300 North Korean refugees to examine the experience of women in North Korea's fitful economic transition. Like other socialist states, North Korea has maintained a de jure commitment to women's rights. However, we find that women have been disproportionately shed from state-affiliated employment and thrust into a market environment characterized by weak institutions and corruption. As a result, the state and its affiliated institutions are increasingly populated by males, and the market, particularly in its retail aspects, is dominated by women. Among the most recent cohort of refugees to leave North Korea, more than one-third of male respondents indicate that criminality and corruption is the best way to make money, and 95 percent of female traders report paying bribes to avoid the penal system. In short, the increasingly male-dominated state preys on the increasingly female-dominated market. These results paint a picture of a vulnerable group that has been disadvantaged in North Korea's transition. Energies are directed toward survival, mass civil disobedience is reactive, and as a group, this population appears to lack the tools or social capital to act collectively to improve their status.

JEL Codes: P2, J16, F22

Keywords: gender, transition, refugees, North Korea

Stephan Haggard is the Lawrence and Sallye Krause Professor at the University of California, San Diego Graduate School of International Relations and Pacific Studies. He is the author of *The Political Economy of the Asian Financial Crisis* (2000), and coauthor of *The Political Economy of Democratic Transitions* (1995), *Famine in North Korea: Markets, Aid, and Reform* (Columbia University Press, 2007), and *Witness to Transformation: Refugee Insights into North Korea* (2011). He is a member of the Advisory Committee of the Peterson Institute for International Economics. **Marcus Noland** is the deputy director of the Peterson Institute for International Economics, where he is also a senior fellow, and a senior fellow at the East-West Center. He has been associated with the Institute since 1985. He was a senior economist at the Council of Economic Advisers in the Executive Office of the President of the United States and has held research or teaching positions at Yale University, the Johns Hopkins University, the University of Southern California, Tokyo University, Saitama University (now the National Graduate Institute for Policy Studies), the University of Ghana, the Korea Development Institute, and the East-West Center. Noland is the author of *Korea after Kim Jong-il* (2004) and *Avoiding the Apocalypse: The Future of the Two Koreas* (2000), which won the 2000–2001 Ohira Memorial Award, and coauthor of *Famine in North Korea: Markets, Aid, and Reform* (Columbia University Press, 2007) and *Witness to Transformation: Refugee Insights into North Korea* (2011).

Note: The authors would like to thank Alex Melton for able research assistance, Dan Pinkston and Chung Tae-un for their assistance in conducting the interviews, and three anonymous referees for their comments. This work was supported by Academy of Korean Studies grant AKS-2011-R39.

INTRODUCTION

Socialists, going back to Marx and particularly Engels, have grappled with the “woman question” in both theory and practice (Engels 1985). Socialist states typically enshrined gender equality in law at an earlier stage than their capitalist counterparts, though socialist emancipation often created a double burden as women were called on to enter the workforce while simultaneously bearing the traditional duties of a homemaker. In certain respects North Korea followed this pattern, albeit with some distinctively North Korean twists.

However, the North Korean economy is now undergoing a second transition: from a planned state-socialist system to a hybrid system in which the state has grudgingly acquiesced to a larger role for the market. This second transition has a strong gender dimension. Women have been shed from the state-owned enterprise (SOE) sector in greater numbers than men and have gravitated to market-oriented employ. This development appears particularly pronounced among married urban women.

In other settings, this newfound freedom might be empowering, liberating women both from the surveillance of the workplace and traditional patriarchal relationships rooted in the household; we return this possibility in the conclusion. However in other developing countries, the informal sector is allowed to play a central role in both urban and rural employ. The North Korean regime, by contrast, has taken an ambivalent if not actively hostile posture toward the market, and thus toward the women who populate it.

Documenting changes in North Korea’s notoriously closed economy presents formidable challenges, but researchers have begun to exploit the opportunity provided by refugees (cf. Chon et al. 2007; Lee 2007; Lankov and Kim 2008; Kim and Song 2008; Lee et al. 2008; Chang, Haggard, and Noland 2009a, 2009b; Kim 2010; Haggard and Noland 2010a; 2012). This paper explores the gender dimensions of North Korea’s transition by considering the results from a 2008 survey of 300 North Korean refugees living in South Korea.

The paper begins with a brief historical overview of the role of women in the North Korean political economy, with an emphasis on the dramatic shifts that occurred as the state socialist system broke down during the famine of the mid-1990s and the country experienced “marketization from below.”

We then turn to an examination of the sample, household economics, and the implications of the fact that North Korean women have been disproportionately involved in marketization that the state has sought to limit, control, and even criminalize. Women are not differentially prone to arrest and do not appear to receive distinctly worse treatment than men. Indeed, there is evidence that the police exercise relative restraint towards the middle-aged married women who figure prominently in retail trading. But women’s higher levels of market participation make them more susceptible to confrontations with officials and entanglement with the penal system. We argue that high levels of discretion with respect to arrest and detention together with high levels of brutality facilitate predatory corruption. Among the most recent cohort of refugees to leave North Korea 95 percent of female traders report paying bribes to

avoid entanglement with the penal system. In short, the increasingly male-dominated state preys on the increasingly female-dominated market.

Do these findings have political implications? Do women have distinctive attitudes? Are they more likely to engage in collective action? Our survey shows that women are cognizant of growing levels of inequality and corruption. However, we do not find that women hold distinctly dissident views, are more willing to communicate them to their peers, or are more likely to organize. Taken together, these results paint a picture of a vulnerable group that has been disadvantaged in North Korea's transition. Women's energies are directed toward survival. Despite episodic reports of spontaneous protest, market women appear to lack the tools or social capital to act collectively to improve their status.

WOMEN IN THE NORTH KOREAN POLITICAL ECONOMY: FROM PLAN TO UNPLANNED MARKETIZATION

In 1945, even before the 1948 founding of Democratic People's Republic of Korea (North Korea), local authorities abolished the traditional hierarchical patrilineal household registration system. The following year the Gender Equality Law was enacted, prescribing equal rights to women in the areas of inheritance, marriage, divorce, child custody, and support claims. The law also banned polygamy, concubinage, and prostitution. The 1946 Statute on the Labor of Manual and Clerical Workers guaranteed equal pay for equal work (Shin 2001, Jung and Dalton 2006). In 1958, Cabinet Decision 84 established targets to increase women's participation in education and various professions. To support both reproduction and women's participation in the labor force, some traditional women's work was socialized through the establishment of nurseries, kindergartens, laundries, and other household services (Ryang 2000, Shin 2001). The 1972 Constitution guaranteed equality, and subsequent legislation such as the Socialist Labor Law (1978) and the Infant Education Law (1976) elucidated legal guarantees with respect to maternity and childbirth.

Nevertheless, as in other socialist states, women continued to face a double (or triple) burden. In a speech to the Fifth Congress of the Korean Workers Party, founding leader Kim Il-sung declared that women would be "liberated" from heavy household chores via technological change: gas or oil instead of coal cooking, access to appliances such as refrigerators and rice cookers, and greater provision of processed foods. These goals were subsequently enshrined in the 1972 Constitution as well (Ryang 2000, Shin 2001).

Needless to say, reality did not live up to the rhetoric. As Park (2011, 160) observes, "In the authoritarian culture so prevalent in North Korea, the concept of equality was alien to both men and women." Women continued to be channeled into relatively low status and pay occupations. As the economy began to falter in the mid-1980s, the resources devoted to the nurseries and other institutions designed to ease the double burden on women were cut. Married women increasingly dropped out of the labor force, and the role of housewife became the norm in some locales (Jung and Dalton 2006). The so-called August 3rd movement of 1984 created new work units (August 3rd units) sought to mobilize

marginal participants in the labor force, including young mothers, to use waste materials for the local production of consumer goods. But as the economy deteriorated through the 1990s, the lofty aspirations with respect to gender equality became increasingly illusory, and the 1998 Constitution even dropped the clause from the 1972 Constitution stipulating that the state “shall liberate women from the heavy family chores” (Park 2011).

Ryang (2000) argues that the early efforts to enshrine equality were made by the People’s Committee under the auspices of the USSR with limited local buy-in by North Korean officials or participation of North Korean women themselves. Instead, as Jung and Dalton (2006) argue, the cult of personality around Kim Il-sung (often described as the benevolent “Fatherly Leader”) had strong patriarchal elements, recasting the whole nation in line with traditional or even Confucian family structures. The revolutionized female ideal became that of mother. In traditional Marxist terms, the “woman” question was transformed into the “mother” or “mother-worker” question with little attention to other dimensions of gender. For example, while North Korea has all sorts of laws on reproduction, there is no legislation on sexual violence and harassment (Jung and Dalton 2006).

Such was the status of women when North Korea entered its particularly problematic transition beginning in the mid-1990s. Prior to that time, North Korea maintained a classic centrally planned economy, notable only for the rigor with which markets were suppressed and autarky from the world economy was pursued. Over the past two decades, the importance of the market has grown, but not due to proactive reform. Rather marketization emerged as the product of state failure and particularly the famine in the 1990s. The state’s inability to fulfill its economic obligations unleashed an unplanned, bottom-up marketization of the economy resulting in the alteration of social and political relations among the populace.

Rather than leading a transition, policy has been ambivalent, sometimes acquiescing to facts on the ground, at other times attempting to reverse them. In July 2002, the government initiated a major policy reform with four components: microeconomic policy changes, including alteration of administered prices and wages; macroeconomic policy changes, including the introduction of direct taxes; the establishment of special economic zones; and aid-seeking.¹ Since roughly 2004–05, the policy trend has been one of reform in reverse. The government introduced new controls on both domestic markets and cross-border exchange, and pursued a failed attempt to resuscitate the state-run quantity rationing system for food.

1. North Korean enterprises were instructed that they were responsible for covering their own costs despite mandated wage increases for favored groups and continued efforts to maintain an administered price structure that badly lagged the inflation in market prices. In the absence of any formal bankruptcy or other exit mechanism, there was no prescribed method for enterprises squeezed between these conflicting imperatives to cease operations. One response was for state-owned enterprises (SOEs) to engage in entrepreneurial activity, either by establishing “funding” and “foreign exchange earning” squads within the SOE or by effectively outsourcing entrepreneurship and adjustment via August 3rd units.

A botched November 2009 currency reform epitomized this trend, destroying an unknown share of household savings and adversely affecting market traders in particular.

One side effect of famine, economic mismanagement, and political repression has been an ongoing exodus of refugees, primarily into China from whence more than 20,000 have eventually found asylum in South Korea. Most are women, and the gender dimension of the refugee problem is now thoroughly documented (Human Rights Watch 2002, Amnesty International 2004, Muico 2005, Lee 2006, Committee for Human Rights in North Korea 2009, National Human Rights Commission of Korea 2010).

There is evidence that men and women have had differing experiences in transit. In China, male refugees are often employed in heavy labor such as mining, construction, and forestry, and may possibly be more involved in so-called round-tripping: voluntarily returning to North Korea bearing food or money, then returning to China. As we found in our sample, women refugees reaching South Korea spend longer in transit than men, in part because they are more likely to be the victims of human trafficking, sex work, and brokered marriages with rural Chinese husbands.² Not surprisingly, a survey of North Korean refugees in China found that women were more likely than men to experience fear and anxiety about their vulnerabilities in China (Chang, Haggard, and Noland 2009a).

However, the differential experience of men and women was not limited to the refugees; the failed transition of the mid-1990s within North Korea also had a strong gender dimension. During the famine, women as well as men took responsibility for securing food for their families, both by generating income and in navigating the cash transactions and barter through which staples and other foodstuffs were secured (Lankov and Kim 2008). As the state socialist system frayed, households appear to have decided that it was important for male heads of households to retain state employ. This allowed households to meet security requirements and access residual social services provided through the work unit, however inadequate. Women either lost their jobs as state-owned enterprises downsized (necessity entrepreneurship) or left declining state firms to exploit more lucrative market opportunities (opportunity entrepreneurship).³

Policy clearly played a role in this process. Women have been disproportionately shed from employment in SOEs. Working for the state is considered more politically advanced “man’s work,” though in some cases women have been provided some assistance in the form of start-up capital or licenses in the

2. The unions are not officially recognized, and indeed are giving rise to a population of children who are effectively stateless, regardless of the constitutional niceties of China and North Korea (Robinson 2010). In its annual reports on human trafficking the United States State Department regularly classifies North Korea in the worst category, Tier 3 (US State Department 2011).

3. The concepts of opportunity and necessity entrepreneurship were introduced by the widely cited Global Entrepreneurship Monitor project and respectively refer to business-creating activity induced by opportunity and business creation driven by the absence of other work options together with the need for income (Kelley, Singer, and Herrington 2012).

emerging market-oriented retail sector. Since 2004–05, the state has also banned men from working in the markets. In 2007, it prohibited younger women from working there, ironically giving older women a leg up in at least the retail aspect of North Korea’s marketization.⁴ Because of their dependence on the market, women have been prominent in the few documented instances of civil disobedience against government controls. For example, in March 2008 protests erupted in the markets in Chongjin when authorities sought to limit trading in response to orders from Pyongyang.

SAMPLE CHARACTERISTICS

To explore the role of women in this marketization process, we draw on a survey of 300 North Korean refugees living in South Korea conducted in November 2008 (methodological detail is contained in appendix A). Such surveys are susceptible to two sorts of bias, an intrinsic one involving self-selection, and a second, extrinsic one involving unweighted samples. With regard to the first, those who undertake the risks of trying to leave North Korea probably have some otherwise unobserved individual characteristics that differentiate them from the rest of the population; these may include more adverse life experiences and more severely truncated opportunities, both of which could give rise to both behaviors and attitudes that are quite different from the population as a whole. The survey presented below may thus accurately capture the views of the refugee community in South Korea, but may not accurately reflect the experiences of the current North Korean population.

A second, more tractable issue is that the population of refugees may not be demographically representative of the resident non-refugee population, overrepresenting particular segments of the population such as women or particular occupational categories. We know, for example, that women make up roughly half the population of North Korea but account for a much larger share of the refugee community in South Korea (and of the sample). This problem can in principle be addressed *ex post* using multivariate techniques, as is done below by combining estimated coefficients with national level demographic information to construct counterfactual estimates for the North Korean population as a whole.

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. A significant majority are women (63 percent), reflecting a growing gender gap among the refugees who manage to reach South Korea as well.⁵ Residents of the northeast provinces are overrepresented, as

4. It has been argued that as the relative economic position of men has declined, spousal abuse has increased, providing a distinct incentive for women to emigrate (Park 2011).

5. 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 2009a, 2009b).

has been the case with previous surveys conducted in both China and South Korea. Most respondents were from two northeast provinces: North Hamgyong province (50 percent), followed by South Hamgyong province (14.7 percent). This distribution of responses actually makes these provinces somewhat less overrepresented than in earlier surveys, but these provinces do nonetheless account for only about 23.1 percent of the North Korean population (United Nations Population Fund 2009).⁶

North Korea's mandatory education includes a year of kindergarten, 4 years of primary school, and a 6-year middle school; at that point (age 15 to 16), students come to the end of mandatory education or are channeled into technical school (2 to 3 years), college (4 years), or university (4 to 6 years), and from the latter on to postgraduate studies. Women in our sample exhibit slightly lower levels of educational attainment than men, with unmarried women reporting somewhat less schooling than married women. Multivariate statistical analysis, not reported in the interests of brevity, indicates that this difference in education is not attributable to marriage per se. Rather it appears to be connected to the relatively young age of the unmarried female refugees at time of departure, and possibly to their disproportionately rural backgrounds.

The occupational status of the respondents is complicated somewhat by the presence of 52 self-identified housewives in the sample (table 1). 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 was laborers (40 percent), followed by government (17 percent), and then merchants, farmers, professionals, soldiers, and teachers, each accounting for between 5 and 8 percent of the sample.

Almost two-thirds of the housewives are from rural areas, meaning that they are living on state farms or cooperatives, and urban and rural housewives may have distinct experiences. We doubt seriously whether self-identification as a housewife on the part of rural respondents implies release from agricultural labor, while urban housewives may include a disproportionate number shed from SOE employment and thrust into necessity entrepreneurship.

Looking at the occupational distribution by gender, not surprisingly, males are overrepresented in the military and government/party, and females are overrepresented in teaching. Interestingly, 6 percent of respondents listed their occupation as merchant, and nearly two-thirds of those were women, roughly in line with women's total sample share. Again, the treatment of self-identified housewives is problematic; if they are excluded from the sample of the economically active, then the propensity for a woman to be a merchant would be noticeably higher than that for a man.

6. 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.

Unmarried females appear occupationally distinct: They are disproportionately laborers, perhaps consistent with their lower levels of educational attainment. It is not surprising that this group has been a target of trafficking.

A final set of demographic variables of importance are the date 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.

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 consider what we will call the pre- and post-reform subsamples, with those leaving in 2003 and after as the post-reform group. These two groups are almost exactly equal in size. For other questions the pre-reform 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). Similarly, we can divide the post-reform group into a reform era group (those leaving between 2003–2005, 35 percent of the sample) and a retrenchment group (2006 and after, 15 percent). However, when the sample is disaggregated by gender (table 2), it is evident that unmarried women exited the country disproportionately early: two-thirds left during the pre-reform period, and only one-third left during the “post-reform” era. In terms for the four era periodization, 40 percent of the unmarried women left in the earliest famine era period, and only 5 percent during the most recent retrenchment era.

How then does one square the notion that females tended to leave North Korea relatively early, but account for a rising share of recent arrivals in South Korea? As shown in figure 1, men and women, especially unmarried women, exhibit different patterns with respect to duration in transit between North and South Korea. For men, the median length of time in third countries before arriving in South Korea is two years. For unmarried women it is five years.⁷ There is little difference across the subsamples in time residing in South Korea when interviewed; in all cases the median period was four years. Time spent outside North Korea could potentially be important both in terms of memory bias and socialization to new views of North Korea because of time spent in China and particularly South Korea. However neither variable was statistically significant in any of the subsequent statistical analysis reported below.

7. One can only speculate as to the reasons. Unmarried people may have been less risk averse in terms of the migration decision and better able to adapt once in China. This could contribute to a phenomenon that emerges from some interviews. Some young women made the decision to migrate to China, but once settled in China and exposed to more information, made a second decision to on-migrate to South Korea.

WOMEN IN THE HOUSEHOLD ECONOMY

Historically money and prices played little role in North Korea's planned economy. Urban residents received monthly rations for household goods distributed at nominal prices; workers on agricultural cooperatives and state farms retained annual in-kind allotments of food, and received a basket of consumer goods in return for agricultural output sold to the state at a derisory procurement price.

The most common work unit classification among the respondents was state-owned enterprise, both for the respondents themselves (23 percent) and for spouses (31 percent). In addition, a significant share of respondents (10 percent of the sample) worked for the August 3rd detail of an SOE. These work units were set up in the 1980s to engage in local production of necessities. State farms or cooperatives accounted for 14 percent of respondents and 10 percent of spouses, although as we have seen this underestimates the share of rural population in the survey. Government and party offices accounted for 9 percent and 2 percent, respectively; the army was also represented among the refugees.

Engagement in private activities, particularly trading, is ubiquitous but is nonetheless gendered (table 3).⁸ Women report more involvement in trading than men (76 percent versus 63 percent, the difference in means significant at the 5 percent level), and male respondents report more trading by their female spouses than vice versa (68 percent versus 55 percent, the difference significant at the 10 percent level). These magnitudes are consistent with those obtained in an earlier survey cited in Kim and Song (2008) and Lee et al. (2008). Female participation in "other business activities"—probably including provision of services—is slightly higher than male participation.

However, more males report participation in August 3rd units (23 percent versus 10 percent, significant at the 1 percent level). Women also report higher participation rates for their spouses in August 3rd units than men reported about their spouses. This result—higher participation in August 3rd units by men—is notable because a prerequisite for participation in August 3rd units is employment in the state sector, typically an SOE. Taken together the results in table 3 are consistent with a situation in which men held positions in SOEs and August 3rd units and female labor was either disproportionately shed from state employment or chose to enter the market.

Estimates of the propensity to engage in market activities are reported in table 4. Females per se do not appear distinct (regression 4.1). But as shown in the previous section, single women are statistically distinct with respect to age, education, occupation, and date of departure. When the regressions are

8. The question asked was whether "in addition to your regular work, did you ever engage in the following activities," allowing them to list all that apply: private trading; providing private services (hairdresser, bicycle repair); other private business activity; and August 3rd units. The inclusion of August 3rd unit was designed to catch respondents formally working for an SOE and listing it as the primary work unit, but in fact working in an August 3rd unit. However, we cannot rule out the possibility of double-counting since the questionnaire includes August 3rd units in the main question concerning work units.

reestimated distinguishing married women and housewives, the results indicate that both married women and housewives are almost 50 percent more likely than men (together with single women) to engage in market activities (regression 4.2 and 4.3). When the group of housewives is disaggregated into rural and urban components, it is clearly the urban housewives that are generating the result (specification 4.4). These urban housewives are precisely the group most likely to have been either shed from employment in state-affiliated institutions and thrust into necessity entrepreneurship or to have had access to market opportunities because of urban residence. There is evidence that market participation surged during the reform period, but did not significantly contract during the subsequent period of retrenchment.

It is possible that the raw results on sources of market participation may reflect the overweighting of some demographic groups relative to the underlying population. In principle it is possible to combine the coefficients reported in table 4 with national level demographic data (sources described in appendix B) to derive projected values, conditional on the fact that these models have been estimated from a sample of refugees whose experiences may not mirror those of the society as a whole. The sample and projected national means, along with their 95 percent confidence intervals, are displayed in figure 2. There is a noticeable difference between the sample values and the projected nationwide results indicating that our sample overrepresents the most marketized demographic groups. This outcome is not surprising given the large share of women in the sample. For all four specifications the results fall just within the 95 percent confidence limits.

The respondents were asked what share of household income came from private business activities at the time the individual left North Korea, a more accurate indicator of dependence on the market than simple engagement in a given activity. The results are staggering. The modal response, nearly half the sample, reported that *all* of their income came from private business activities at the time they left North Korea (table 5). More than two-thirds of the respondents—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. Moreover, there appears to be little difference between respondents that left in the famine, post-famine, reform, and retrenchment periods; dependence on market income is high in all periods, although by the reform and retrenchment periods virtually every household received at least some income from the market.⁹

There is a modest tendency for women to report greater reliance on the market for income than men. More than half of married women (51 percent) indicated that they were getting all their income from market activities. However because of the uniformity of participation in the market across the sample, gender differences are not statistically significant.

9. The apparent lack of trend is consistent with an earlier survey done largely on refugees who had left North Korea before either the 2002 reform or the 2005 retrenchment (Kim and Song 2008, Lee et al. 2008).

Yet a third way of getting at the extent of marketization is to move from employment and income to expenditure, and particularly for food. In principle, urban residents, about two-thirds of the population, were fed via the state-run quantity rationing system, the public distribution system (PDS). Yet fully 28 percent of urban residents in the sample indicated that they never received food through this channel. Among those who indicated that they had received food from the PDS, it had ceased to be the primary source of food for more than 20 percent of this group by 1993. Within two years, less than half of respondents were obtaining food primarily through the PDS.¹⁰ Instead, the market and self-production became the primary means of accessing food (table 6).¹¹

The data on reliance on the market for food reveals a strong gender dimension. The shift from state-distribution to the market is particularly evident for females: From 1999 through the end of the sample period, not a single female respondent reports that the PDS was her principal source of food. Access to the PDS was tied to employment in state-connected entities, and this effective denial of access to the state-run rationing system is consistent with shedding of female labor as well as the necessity to exploit market opportunities to supplement declining and erratic rations. Again, unmarried women appear distinct; they are much more reliant on their own efforts, either purchasing food in the market, or growing it themselves, and appear to have had noticeably less access to state support, either through the workplace or the PDS. These findings are consistent with econometric evidence that women were more likely to have reported purchasing a higher share of their consumption in the market and were more likely to get all their food in the market (Haggard and Noland 2010a).¹²

THE CRIMINALIZATION OF ECONOMIC ACTIVITY

Given that the women appear to occupy a growing role in market activity, it is important to understand how the state treats this activity. The answer is that the regime is highly ambivalent about it, oscillating between grudging tolerance during periods of severe shortage and harsh crackdowns during periods when it seeks to reconstitute the state sector. In addition to the well-known political prison camps,¹³ the regime

10. These results hold for the full sample, the post-famine subsample, and the post-reform subsample, demonstrating that they are not simply an artifact of sample truncation or censoring associated with early leavers providing relatively early-dated responses to the question.

11. The fact that so many reported growing their own food is particularly revealing given the low share of farmers in the sample, suggesting that resort to self-reliance was pursued even by non-agricultural households.

12. However, the estimates could also be misleading due to an artifact of the household division of labor. If women were responsible for shopping, their answers may more accurately reflect real household consumption patterns than the answers provided by men. If so, the significance of the gender variable could reflect the fact that men, lacking first-hand knowledge, provide downwardly biased estimates of how much household food was being obtained through the market.

13. The hierarchy of penal institutions includes the notorious *kwan-li-so*, variously translated as political prison camps, labor colonies, or concentration camps. In addition, the state operates the *kyo-hwa-so*—literally, a “place to make someone

has criminalized a range of market activities and established an extensive system of low-level labor training facilities (*ro-dong-dan-ryeon-dae*) to incarcerate people involved in unauthorized movement to access food, black market activity, border-crossing, and the other economic crimes (Noland 2000). The 2004 reform of the criminal code and subsequent amendments regularized these facilities and specified “labor training” for up to two years as punishment for a growing number of economic and social crimes (Han 2006, Haggard and Noland 2010b).

Incarceration in the two types of lower-level facilities—the labor training facilities (*ro-dong-dan-ryeon-dae*) and the collection centers (*jip-kyul-so*)—was by far the most common form of contact with the penal system among our respondents. Of the 102 survey respondents who reported some incarceration, 49 reported spending time in a labor training center and 68, or 23 percent of the entire 300-person sample, reported being detained in collection centers.

There is some evidence that the state has been forced to acknowledge the central role that market activity plays in sustaining households and it has reenforced the gendered household division of labor. In aggregate, arrest rates are correlated with participation in market activity: Those involved in market activities are almost half again as likely to be incarcerated (table 7). However, we do not find that gender per se increases the propensity to be incarcerated and in terms of raw sample numbers, men are more likely to have been incarcerated than women (43 percent versus 30 percent, the difference in means significant at the 5 percent level). When arrested, men are more likely to have come into contact with the political as distinct from the regular police (79 percent of male respondents versus 63 percent of female respondents, the difference significant at the 10 percent level), and perhaps as a consequence, they are more likely to have been detained in harder core institutions (i.e., larger shares in prisons and collection centers, and fewer in labor training facilities that have been used to manage “economic crimes”).

While participation in the market is associated with a greater propensity to be arrested, the results in table 7 suggest that the state may regard male participation in the market as more threatening than female participation and acquiesce where market activities are small scale, part-time, and seen as serving primarily survival purposes. Consistent with previous results, this effect does not appear to apply equally to all women: Housewives, particularly urban housewives, who have probably borne the brunt of SOE downsizing and as such may receive official imprimatur for their activities, appear to be treated more leniently by the police.

Contact with the police and penal system is harsh. Once arrested, detainees receive little formal due process; of the 102 respondents in the 2008 survey who had been incarcerated, only 13 reported even

better through education” and *jip-kyul-so* or “collection centers,” institutions that roughly correspond to felony prisons and misdemeanor jails, respectively.

receiving a trial at all. There is little variation in this pattern by gender; men and women are denied trials at similar rates.

Abuse is ubiquitous throughout the system: In both the lower-level criminal facilities (the collection centers and the labor training centers), nearly half of respondents report seeing executions, roughly three-quarters report forced starvation, and nearly a third report witnessing deaths from beatings and torture. These levels of violence are witnessed despite the generally shorter periods of incarceration in these lower-level facilities.¹⁴ The pattern of responses is quite similar to that obtained in an earlier survey conducted in China (Chang, Haggard, and Noland 2009a): a high response rate with respect to generalized forms of abuse, a much lower response rate on the highly specific question on infanticide, lending support to the fact that respondents are not simply providing interviewers with information that they would like to hear.

Reported rates of witnessing such abuses are high for both genders, though women consistently report witnessing abuse at lower rates than men. Again, this may possibly reflect some forbearance with respect to market activity, for example through incarceration of women in facilities that are de facto if not de jure sex-segregated, either by residence, work activity while in detention, or both (table 8). However, we have evidence from other sources that sexual abuse in North Korean prison facilities appears to be rampant, most commonly abuse of female prisoners by guards (Hawk 2012, Harden 2012). Unauthorized sexual relations are prohibited, and women who become pregnant while incarcerated are subject to severe punishment.¹⁵

Given the conditions in North Korean prisons, it is not surprising that other research has found that incarceration of North Korean refugees is highly correlated with psychological distress akin to post-traumatic stress disorder (PTSD).¹⁶ Women appear particularly vulnerable. Respondents in one survey of 100 female refugees in China conducted between August 2001 and October 2003 reported experiences including arrest (44 percent), extradition (34 percent), human trafficking (24 percent), rape

14. The mean period of incarceration in both types of facility was in the range of one month to one year. Prisoners experiencing this typical length of incarceration in a collection center witnessed abuses at the following rates: executions (75 percent), forced starvation (100 percent), and death by torture and beatings (50 percent). For the labor training centers, incarceration for the typical period of time was associated with observing abuses at slightly lower rates: execution (60 percent), forced starvation (90 percent), and death by torture or beating (20 percent).

15. In addition, the North Korean regime has taken a particularly dim view of marriages between North Korean women and Chinese men. Repatriated women who are suspected of becoming pregnant in China have been subject to forced abortions, and infanticide has been practiced. The legal code changes also specify relaxed treatment for pregnant women, though in practice these protocols are breached, and in some cases forced abortions continue to be practiced (Lee 2006; Sheridan 2006).

16. A growing clinical literature has documented how the particular ordeals experienced by North Korean refugees have been associated with major psychiatric disorders, including PTSD (Jeon 2000, Lee et al. 2001). Controlled clinical studies by doctors working with North Korean refugees in South Korea found few of their patients to be free of psychological disorders, with rates of PTSD ranging from 30 percent (Jeon et al. 2005), to 48 percent (Baubet et al. 2003), to 51 percent partial PTSD, and 26 percent full PTSD (Kim, Yoon, and Han 2007).

(20 percent), and prostitution (9 percent) (Kang 2006). Not surprisingly, these women particularly fear arrest and incarceration (Chang, Haggard, and Noland 2009a).

CHANGING PATHWAYS OF ADVANCEMENT

Despite the fact that authorities have been constrained to allow women to operate in the market, and may even show some forbearance, the criminalization of economic activity seems almost designed to promote extortion by state officials. Figure 3 reports responses to three questions about the business environment from female respondents who engaged in private business or market activities, grouped by time of departure. In each case, respondents were asked to rate their opinion or belief on a scale of 1 to 5, where 1 indicates strong disagreement and 5 indicates strong agreement. The combined “totally agree” and “agree” shares are shown.

In all periods, a majority of the women agree with the statement that “I was unable to trade in legal markets,” although this share declines over time. Majorities also agree with the statements that “the government frequently changes the rules governing market activities,” and “I had to pay bribes to engage in private activity.” Perhaps not surprisingly, the patterns of response to questions about capricious policy and bribery run parallel and could be interpreted as reflecting the vicissitudes of North Korean policy. During the reform period the affirmative response rates fall, but then rise again when the state reverses reform and retrenches, with fully 95 percent of the women reporting a necessity to pay bribes in the most recent period.¹⁷

The survey respondents were also asked a series of questions designed to get at changing 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 both the military and engaging in business, with more than 70 percent of the respondents citing it in all sample periods. But “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-reform periods.¹⁸

A more striking set of social changes is apparent from a question asking “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; or none of the above” (table 9). Although securing a government or party position is

17. The high reported response to changing market rules parallels a similar result obtained in a survey of 300 Chinese firms doing business in North Korea, where 79 percent of the respondents cited arbitrary changes in rules and regulations as a barrier to doing business in North Korea (Haggard and Noland 2012).

18. Interestingly, despite the proclamation of military-first politics, the army declined as a way of getting ahead—while institutionally the military may have experienced rising influence, from an individual standpoint, the largely conscript army was not seen as a channel of advancement, with not a single respondent in the most recent subsample citing it as the way to get ahead.

highly desirable there is no sense that merit is rewarded. In the post-reform period, only a single (female) respondent indicated that working hard at your assigned job was the best way to make money. The most frequent response among both women and men was that engaging in market activities was the way to make money.

But a striking finding is the growing and gender-differentiated share that regarded corruption and criminality as the most lucrative career path. More than one-third of male respondents (36 percent) in the most recent cohort reported that criminality and corruption are the easiest ways to make money as compared to 24 percent of female respondents, possibly reflecting their differential opportunity to do so via their disproportional representation in the state apparatus.

These results shed important light on the responses to the question about the gender dynamics of how to get ahead in North Korea. Read in conjunction, the answers to the two questions suggest strongly that an official position is not valuable because hard work and merit is rewarded, but because it provides a platform for engaging in business or pursuing corrupt or criminal rent extraction. Indeed, the observation is confirmed directly by the subset of respondents employed in government or party offices who reported a rising corruption among their colleagues (Haggard and Noland 2010a, table 7). But this process has a gender dimension as well. Women have been differentially shed from public employment and have been thrust into, or chosen to enter, the market. A consequence is that the state sector—and the platform for corruption it provides—is increasingly male dominated. In essence an increasingly male-dominated state preys on an increasingly female-dominated market.

THE FEMINIZATION OF DISSENT?

Given that women operate at the interface between state and market, we would like to know if they have distinctive political views or whether they might even come to play a leading role in resisting the regime; our survey included questions probing subjective assessments of the government on a number of dimensions. Not surprisingly, the refugees as a whole hold overwhelming negative attitudes toward the incumbent regime. Nearly 87 percent of the respondents disagreed or strongly disagreed with the statement that the Kim Jong-il regime was getting better. More than 90 percent of the respondents disagreed or strongly disagreed with the statement that the economy was improving, citing rising materialism (92 percent), corruption (87 percent), and inequality (84 percent) as problems. Moreover, the share of respondents holding the government responsible for these developments grows across the time-of-departure cohorts; more than 95 percent among those who left in the post-retrenchment period (i.e., after 2005) held the government rather than foreign powers as responsible for these developments. Given how negative views are, there is little variation in perceptions by gender; if anything, women tend to have slightly less critical attitudes.

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. It has been argued that the market has become a semi-autonomous zone of social communication, and potentially, political organizing (Lee 2009, Everard 2011). Women are prominent in the market, and have figured prominently in rare instances of civil disobedience that have revolved around pocketbook issues (Martin and Takayama 2008). Could nascent dissent in North Korea have a feminine cast?

In table 10, the refugees were again presented the refugees a series of statements about their experiences in North Korea and asked that they grade their responses on a 1 to 5 scale (1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree). For these questions, however, we asked not about the respondent's attitudes and behavior but about "people" in North Korea. We calibrated the questions to reflect an escalating ladder of risky political behavior, beginning with the extent to which people joke, followed by complaining, actual organizing, and the most risky of all, speaking against the leadership. The shares affirming the statement that people make jokes about the government or complain never exceeds 45 percent in any of the subsamples. 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. The share claiming that they did not know about organization was very high, but very few—at most 7 percent—reported that they believed such organizing was taking place. And virtually none of the respondents reported that citizens were complaining about Kim Jong Il.

What about collective action through the market? Could participation in market activities serve to overcome barriers to collective action? To what extent might the market itself become the locus of overt political conflict with the government? Survey responses depict relatively low levels of collective action among traders. When asked whether traders "cooperated" with each other, the share of respondents agreeing or strongly agreeing ranged from 32 to 42 percent across the four time periods with no perceptible trend—and little variation across gender. 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—implicit evidence of the continuing atomization of North Korean society.

There is little systematic variation in the responses of men and women to the questions in table 10. However, it may be worthwhile to examine if there are gender-related differences in responses once other factors are taken into account. Table 11 reports ordered logit regressions on political attitudes.¹⁹ There is evidence that involvement in the market is correlated with attitudes. In addition, political classification

19. There was insufficient sample variation to permit meaningful modeling of the question regarding organizing against the government.

and contact with the political police matter. There is little evidence that gender matters, however. In only one regression, specification 11.3, is a gender-related variable significantly correlated with political attitudes, in this case that housewives are *less* likely to agree that people are making jokes about the government.

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. Participation in the market is itself one example of such activity. Another is the willingness of citizens to access alternative sources of information that are likely to conflict with official mythology. It is evident that the informational barrier is increasingly permeable: A rising share, a majority in the 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 (table 12). Not only is foreign media becoming more widely available, inhibitions on its consumption are declining as well.²⁰ 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, access to information matters. Consumption of foreign media was associated with more negative assessments of the regime and its intentions (Haggard and Noland 2010b).

However, there appears to be a gender gap with respect to access: A majority of female respondents in all periods report that they did not have access to foreign media, and as a result consumption of foreign media by women was much lower than men. Again, this may be at least in part due to personal experience: Exposure to the penal system and the political police is statistically correlated with consumption of foreign media and news (Haggard and Noland 2010b), and men exhibit both higher propensities of arrest and contact with the political police than do women.

CONCLUSION

Like other socialist states, North Korea has maintained a *de jure* commitment to women's rights, though actual practices have fallen far short of the rhetoric. Importantly, these commitments appear to have been imposed from above supported by little if any political activity at the grassroots. This lack of grassroots activity in support of women's issues may help explain the discriminatory policies undertaken by the North Korean government during its problematic transition. Women have been disproportionately shed from state-affiliated employment and thrust or drawn into a market environment characterized by weak

20. Foreign news media include Chinese and South Korean television viewable in border areas, radio broadcasts aimed at North Korean audiences produced by private and public entities in South Korea and the United States, and increasingly, information delivered via other forms of media such as DVDs and thumb drives (Kretchum and Kim 2012).

institutions and corruption. The upshot is that the state and its affiliated institutions are increasingly populated by males, and the market, particularly in its retail aspects, is dominated by women.

Those involved in market activities have a greater likelihood of arrest and this pattern brings large numbers of North Korean women into contact with the predatory officials and the penal system. Women do not appear to be differentially targeted; to the contrary, the evidence suggests that the state may have acted to reenforce this gendered division of labor by showing some forbearance toward women while behaving more harshly toward men engaged in presumably similar activities. Men come into contact with the political police at higher rates than women and are channeled into harsher institutions; women exhibit a greater propensity to end up in the lowest level institutions that confine economic criminals. Yet conditions in these lower-level penal facilities approximate in measurable ways conditions in facilities designed to house felons and even the most dangerous political prisoners. Moreover, we have evidence from other sources that the treatment of women in these facilities includes sexual abuse.

Because the political views of the respondents are so uniformly negative, political attitudes exhibit little significant variation across genders. In certain respects women are marginally less critical of the government while in other dimensions they evince greater skepticism. Nor, on the whole, do they appear to have a greater propensity to communicate, much less act, on their views.

When taken together these results paint a picture of a vulnerable group that has been disadvantaged in North Korea's transition. Women have been pushed into North Korea's emerging market economy in order to survive, where they are vulnerable to predation by a male-dominated state. To date, evidence of organization, let alone collective action or mass civil disobedience, has been limited. As a group, women appear to lack the tools or social capital to act collectively to improve their status.

Of course, this situation need not continue in perpetuity. Ironically, women are potentially well-placed to take advantage of marketization, at least with regard to retail activities, and are potential beneficiaries of reform if and when it occurs. Whether or not this positive outcome obtains however, is a function of political developments under the new leadership of Kim Jong-un that came to power following the death of Kim Jong-il in December 2011. The initial policy actions of the government were focused on re-enforcing controls, no doubt out of a concern of the challenges market activities pose. Although reforms that would decriminalize and legitimize the market are possible, the political elite may attempt to improve economic efficiency through a reassertion of central political control, as happened repeatedly in the second half of the 2000s. Such an attempt to reconstitute a state-dominated economy, even if it functions on more market-conforming terms, could have the effect of once again marginalizing North Korea's women.

APPENDIX A

The survey was implemented with the cooperation of the Association of Supporters for Defecting North Korean Residents (ASDNKR), a quasi-governmental organization established to assist incoming North Korean defectors through services such as counseling and introducing the newly arrived North Koreans to academic or job opportunities.²¹ A pilot survey was conducted in August and September 2008 of refugees who visited the ASDNKR for personal business. Respondents in both the pilot and subsequent surveys were informed that their participation was voluntary, that the identity of respondents would be held confidential, and that the survey was part of an academic research project based in the United States. Participants in both the pilot and full surveys received modest gift certificates for their participation.

Following the pilot survey, the ASDNKR facilitated contact with the Sung-ui Association, a private civic organization of North Korean defectors with about 7,000 members and 16 offices in South Korea, to recruit staff to conduct the full survey. The Sung-ui Association introduced seven defectors who agreed to administer the survey in neighborhoods with concentrations of North Korean refugees; the staff were compensated for their work.²² Two training sessions were held for the survey administrators to explain the purpose of the research, the nature of the survey instrument, and the requirements of the research project. The survey was stratified on one dimension with respect to which there was some confidence about the underlying population: gender. An effort was made to contact defectors who had recently arrived in the South in order to capture changing views over time, but many refugees had left during the famine period, while others reached South Korea only after having spent months or years in third countries.

The full survey was administered from October to November 2008.

First, the survey administrators contacted individuals in their neighborhoods to conduct face-to-face interviews, yielding about 100 respondents. Second, small groups were recruited to meet for a free lunch or dinner in addition to the gift certificate. Third, a final group was contacted directly through ASDNKR in order to reach the desired sample of 300.²³

21. Later, subsequent to the completion of the survey, ASDNKR was replaced by the Foundation for North Korean Defectors by the 2010 revision of the North Korean defectors law in order to improve and expand services for newly arrived North Koreans.

22. The seven administrators were residents of the Seoul area: two from Nowon-gu, a district in northwestern Seoul with a large defector population; two from Gangseo-gu; two from Yangcheon-gu; and one from Songpa-gu.

23. A total of 313 surveys were administered; 13 were invalid and had to be discarded.

APPENDIX B

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 population for those between the ages of 15 and 64 were taken from the *UN DPR Korea 2008 Population Census National Report*.

For the occupation variables, shares of students and soldiers were calculated from the Korean Statistical Information Service (KOSIS) database. The *United Nation Economic and Social Council Report's* (2002) data on labor force distribution were used to assign shares for professionals, government and office workers, farmers, laborers, and teachers. The share of merchants was based on an estimate of the number of traders (Gey 2004). Share of housewives was calculated from the 2008 census using the figure for women indicating that their main activity was not employment but rather housework. To calculate work unit values, the army and unemployed or retired were assigned the values of soldiers and economically non-active in the 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 the other workunits category. The categorical and binary dependent variables were converted to a 0 to 100 scale from which the probability weighted mean responses were calculated.

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Table 1 Reported occupation of respondent (percent)

Occupation	Male	Female with housewife	Total with housewife	Female without housewife	Total without housewife	Unmarried female	Married female
Professional	6	6	6	8	7	4	9
Government/office work	22	12	15	17	19	7	19
Farmer	5	6	6	9	7	11	8
Merchant	7	6	6	9	8	4	10
Housewife	0	29	19	—	—	—	—
Laborer	41	28	33	40	40	68	32
Teacher	3	5	4	7	5	4	8
Soldier	11	1	5	2	6	0	2
Other	6	7	6	10	8	4	11

Source: Authors' calculations.

Table 2 Departure period differences by gender and marital status (percent)

Departure period	Male	Female	Total	Female unmarried	Female married
Famine era (~1998)	25	24	25	40	20
Post-famine period (1999–2002)	19	28	25	28	28
Post-reform period (2003–2005)	38	34	36	28	36
Post-retrenchment period (2006~)	17	14	15	5	16
Total	110	190	300	40	150

Source: Authors' calculations.

Table 3 Engagement in private activities (percent share of those who answered yes)

In addition to your work duties, did you ever engage in the following activities:	Male respondent	Male's spouse	Female respondent	Female's spouse	Unmarried male respondent	Unmarried female respondent
Private trading	63	68	76	55	65	67
Provision of private services	11	9	8	11	15	6
Other private business activities	25	29	15	14	20	3
August 3rd unit	23	22	10	15	20	6

Source: Authors' calculations.

Table 4 Probit estimates of private market participation

	Binary 1=Private market participation 0=No			
	(4.1)	(4.2)	(4.3)	(4.4)
Female	0.180 (0.176)			
Male		0.389 (0.251)	-0.079 (0.182)	-0.079 (0.182)
Married female		0.755*** (0.240)		
Occupation: Housewife			0.511** (0.252)	
Rural housewife				0.428 (0.286)
Urban housewife				0.718* (0.436)
Workunit: state owned enterprise	-0.544 (0.369)	-0.544 (0.380)	-0.512 (0.373)	-0.503 (0.375)
Workunit: state farm or agricultural cooperative	-0.549 (0.392)	-0.504 (0.406)	-0.569 (0.396)	-0.549 (0.399)
Workunit: government or party office	-0.938** (0.410)	-0.995** (0.421)	-0.870** (0.415)	-0.861** (0.417)
Workunit: army	-0.840* (0.463)	-0.861* (0.477)	-0.812* (0.467)	-0.796* (0.469)
Workunit: unemployed or retired	-0.727* (0.388)	-0.702* (0.400)	-0.772** (0.394)	-0.768* (0.396)
Workunit: other	-1.052*** (0.364)	-1.076*** (0.377)	-1.100*** (0.370)	-1.093*** (0.373)
Post-famine period (1999–2002)	0.383* (0.230)	0.350 (0.235)	0.352 (0.233)	0.351 (0.234)
Reform period (2003–2005)	0.446** (0.209)	0.372* (0.213)	0.468** (0.211)	0.475** (0.212)
Retrenchment period (2006~)	0.220 (0.254)	0.101 (0.260)	0.226 (0.256)	0.221 (0.256)
Constant	0.986*** (0.349)	0.655* (0.396)	1.055*** (0.358)	1.045*** (0.360)
Observations	300	300	300	300
Pseudo R-squared	0.0484	0.0772	0.0609	0.0620
Log likelihood	-162.6	-157.7	-160.5	-160.3
Chi-squared	16.53	26.39	20.82	21.19

Standard errors in parentheses

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

Source: Authors' calculations.

Table 5 Share of income from private activities (percent)

Share of income	Male	Female	Total	Unmarried female	Married female
None	4	4	4	3	5
Less than 10 percent	11	13	12	18	11
10 to 25 percent	6	9	8	13	9
25 to 50 percent	12	4	7	3	4
50 to 75 percent	13	9	10	10	9
More than 75 percent	14	12	13	13	12
All	41	49	46	43	51

Source: Authors' calculations.

Table 6 Primary sources of food (percent)

Famine era	Male n=28	Female n=46	Total n=74	Unmarried female n=16	Married female n=30
Grew it myself	25	20	22	25	17
Public distribution system	11	11	11	19	7
Workplace	11	4	7	0	7
Bought in the market	32	24	27	31	20
Given by friends and family	7	15	12	13	17
Barter	11	15	14	6	20
Other	4	11	8	6	13
Post-famine era	Male n=21	Female n=53	Total n=74	Unmarried female n=11	Married female n=42
Grew it myself	38	21	26	55	12
Public distribution system	0	0	0	0	0
Workplace	0	4	3	0	5
Bought in the market	29	49	43	36	52
Given by friends and family	14	6	8	0	7
Barter	10	19	16	0	24
Other	10	2	4	9	0
Reform era	Male n=42	Female n=65	Total n=107	Unmarried female n=11	Married female n=54
Grew it myself	29	38	35	45	37
Public distribution system	7	0	3	0	0
Workplace	5	0	2	0	0
Bought in the market	33	45	40	18	50
Given by friends and family	2	2	2	9	0
Barter	14	8	10	18	6
Other	10	8	8	9	7
Retrenchment era	Male n=19	Female n=26	Total n=45	Unmarried female n=2	Married female n=24
Grew it myself	26	35	31	100	29
Public distribution system	16	0	7	0	0
Workplace	21	4	11	0	4
Bought in the market	26	42	36	0	46
Given by friends and family	0	4	2	0	13
Barter	5	12	9	0	13
Other	5	4	4	0	4
Entire sample	Male n=110	Female n=190	Total n=300	Unmarried female n=40	Married female n=150
Grew it myself	29	28	29	43	25
Public distribution system	8	3	5	8	1
Workplace	8	3	5	0	3
Bought in the market	31	41	37	28	44
Given by friends and family	5	6	6	8	6
Barter	11	13	12	8	15
Other	7	6	7	8	6

Source: Authors' calculations.

Table 7 Probit estimation of arrest

	Binary: 1=Detained by political or criminal police 0=no				
	(7.1)	(7.2)	(7.3)	(7.4)	(7.5)
Female who generates 50 percent or more total income from private activities	-0.337* (0.177)				
Married Female who generates 50 percent or more total income from private activities		-0.427** (0.182)			
Housewife who generates 50 percent or more total income from private activities			-0.782*** (0.272)		
Urban housewife who generates 50 percent or more total income from private activities				-1.149** (0.535)	
Rural housewife who generates 50 percent or more total income from private activities					-0.576* (0.310)
Private activities	0.484** (0.194)	0.496*** (0.190)	0.444** (0.181)	0.372** (0.178)	0.396** (0.180)
Workunit: August 3rd unit of a state-owned enterprise	0.472* (0.246)	0.490** (0.247)	0.471* (0.249)	0.549** (0.253)	0.412* (0.245)
Workunit: army	0.730** (0.341)	0.734** (0.341)	0.708** (0.340)	0.768** (0.338)	0.741** (0.339)
Education: post college	1.145 (0.722)	1.163 (0.722)	1.292* (0.717)	1.113 (0.725)	1.249* (0.719)
Constant	-0.749*** (0.156)	-0.751*** (0.156)	-0.751*** (0.156)	-0.755*** (0.156)	-0.749*** (0.156)
Observations	300	300	300	300	300
Pseudo R-squared	0.0495	0.0545	0.0636	0.0550	0.0496
Log likelihood	-184.0	-183.1	-181.3	-183.0	-184.0
Chi-squared	19.16	21.10	24.62	21.31	19.21

Standard errors in parentheses

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

Source: Authors' calculations.

Table 8 Human rights abuses during incarceration
(percent)

Share of respondents who:	Male	Female	Total
Witnessed executions	52	48	50
Forced starvation	74	68	71
Death by torture or beating	33	22	27
Killing of newborns	9	6	7

Source: Authors' calculations.

Table 9 Easiest way to make money in North Korea (percent)

Share who identify the easiest way to make money is:	Pre-reform		Post reform	
	Male	Female	Male	Female
Work hard at assigned job	4	3	0	1
Engage in market activities	69	77	62	69
Engage in corrupt or criminal activities	20	14	36	24
None of the above	6	6	2	5

Source: Authors' calculations.

Table 10 Opinions about the government (percent)

	Male	Female	Total	Unmarried female	Married female
People make jokes about the government					
Totally disagree and disagree	38	38	38	48	35
Neutral	23	22	22	26	21
Agree and totally agree	39	37	38	22	40
Unclear/don't know	0	4	2	4	4
People complain about the government					
Totally disagree and disagree	43	46	45	43	46
Neutral	18	17	17	17	16
Agree and totally agree	39	32	35	35	32
Unclear/don't know	0	5	3	4	5
People are organizing against the government					
Totally disagree and disagree	36	42	40	48	41
Neutral	8	9	9	4	10
Agree and totally agree	6	7	7	4	7
Unclear/don't know	49	42	45	43	42
People feel they can speak freely about their opinions about Kim Jong Il					
Totally disagree and disagree	88	92	91	96	92
Neutral	5	4	4	0	5
Agree and totally agree	5	4	4	4	4
Unclear/don't know	1	0	0	0	0

Source: Authors' calculations.

Table 11 Sentiments about the North Korean government and economy (ordered logit)

	(11.1)	(11.2)	(11.3)	(11.4)	(11.5)	(11.6)	(11.7)	(11.8)	(11.9)
	Jokes			Speak freely			Complain		
Female	-0.023 (0.271)		-0.260 (0.311)				-0.161 (0.275)		
Married female		0.058 (0.266)			-0.122 (0.304)			-0.219 (0.267)	
Occupation: housewife			-0.984** (0.385)			-0.401 (0.421)			-0.230 (0.361)
Age at departure from North Korea: 1 = 10 - 19 2 = 20 - 29 3 = 30 - 39 4 = 40 - 49 5 = 50 - 59 6 = 60 - 69 7 = 70 - 79	0.237** (0.105)	0.233** (0.107)	0.298*** (0.108)	0.331*** (0.126)	0.340*** (0.128)	0.359*** (0.129)			
Post-reform Era (2003~)				0.759** (0.317)	0.776** (0.317)	0.744** (0.319)			
Hometown is Pyongyang	1.193** (0.495)	1.208** (0.494)	1.107** (0.497)						
Class: core				1.289** (0.586)	1.307** (0.585)	1.303** (0.585)	1.443*** (0.508)	1.461*** (0.509)	1.454*** (0.507)
Class: wavering				0.695 (0.493)	0.726 (0.492)	0.732 (0.490)	0.550 (0.385)	0.554 (0.384)	0.584 (0.384)
Class: hostile				0.893 (0.641)	0.935 (0.639)	0.909 (0.639)	1.419*** (0.527)	1.426*** (0.525)	1.452*** (0.525)
Occupation: student							-1.123* (0.612)	-1.198* (0.624)	-1.133* (0.611)
Occupation: soldier							-1.744** (0.720)	-1.751** (0.716)	-1.703** (0.712)
Detained by political police (<i>Bo-wi-bu</i>)	0.753** (0.295)	0.760*** (0.295)	0.598** (0.301)				0.547* (0.306)	0.545* (0.306)	0.527* (0.309)
Knew of food aid and did not receive any				-1.397*** (0.368)	-1.393*** (0.368)	-1.408*** (0.369)			
Share of total income that came from private activities (100 scale)	0.006* (0.003)	0.006* (0.003)	0.008** (0.003)						
Observations	205	205	205	206	206	206	203	203	203
Pseudo R-squared	0.0398	0.0399	0.0516	0.0882	0.0868	0.0887	0.0421	0.0426	0.0422
Log likelihood	-271.9	-271.9	-268.6	-183.9	-184.1	-183.7	-289.6	-289.5	-289.6
Chi-squared	22.57	22.61	29.25	35.55	35.02	35.79	25.44	25.77	25.50

Standard errors in parentheses

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

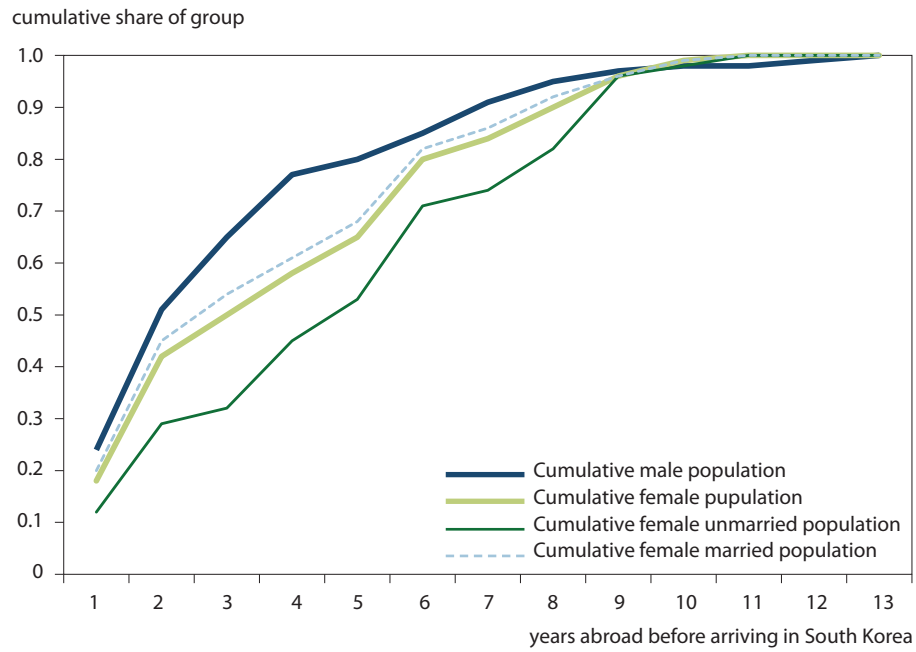
Source: Authors' calculations.

Table 12 Media access by periods and gender (percent)

Famine era	Male	Female	Total	Unmarried female	Married female
I watched or listened to foreign news or entertainment programs including videos or DVDs.	46	20	30	6	27
I had access to foreign news or entertainment programs but did not watch.	7	9	8	13	7
I did not have access to foreign news or entertainment programs.	46	72	62	81	67
Post-famine period	Male	Female	Total	Unmarried female	Married female
I watched or listened to foreign news or entertainment programs including videos or DVDs.	33	28	30	18	31
I had access to foreign news or entertainment programs but did not watch.	14	2	5	9	0
I did not have access to foreign news or entertainment programs.	52	70	65	73	69
Reform period	Male	Female	Total	Unmarried female	Married female
I watched or listened to foreign news or entertainment programs including videos or DVDs.	67	32	48	45	33
I had access to foreign news or entertainment programs but did not watch.	2	6	5	0	7
I did not have access to foreign news or entertainment programs.	31	58	48	55	59
Retrenchment period	Male	Female	Total	Unmarried female	Married female
I watched or listened to foreign news or entertainment programs including videos or DVDs.	68	42	53	0	46
I had access to foreign news or entertainment programs but did not watch.	0	0	0	0	0
I did not have access to foreign news or entertainment programs.	32	58	47	100	54

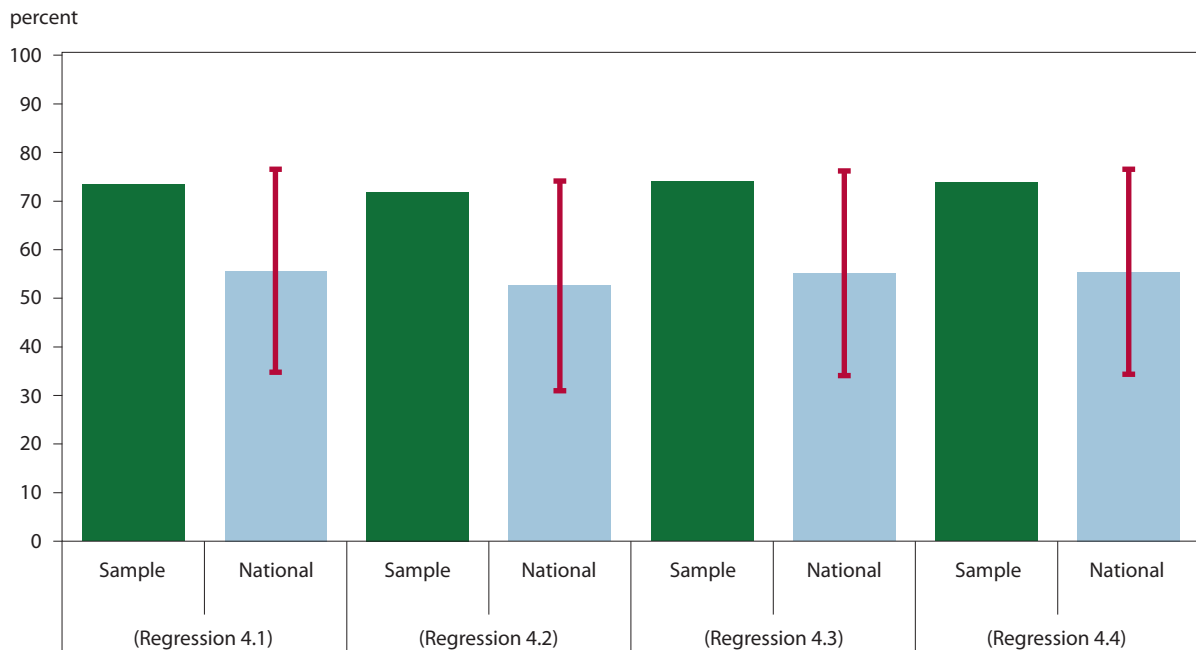
Source: Authors' calculations.

Figure 1 Cumulative shares by group of time spent abroad prior to arriving in South Korea



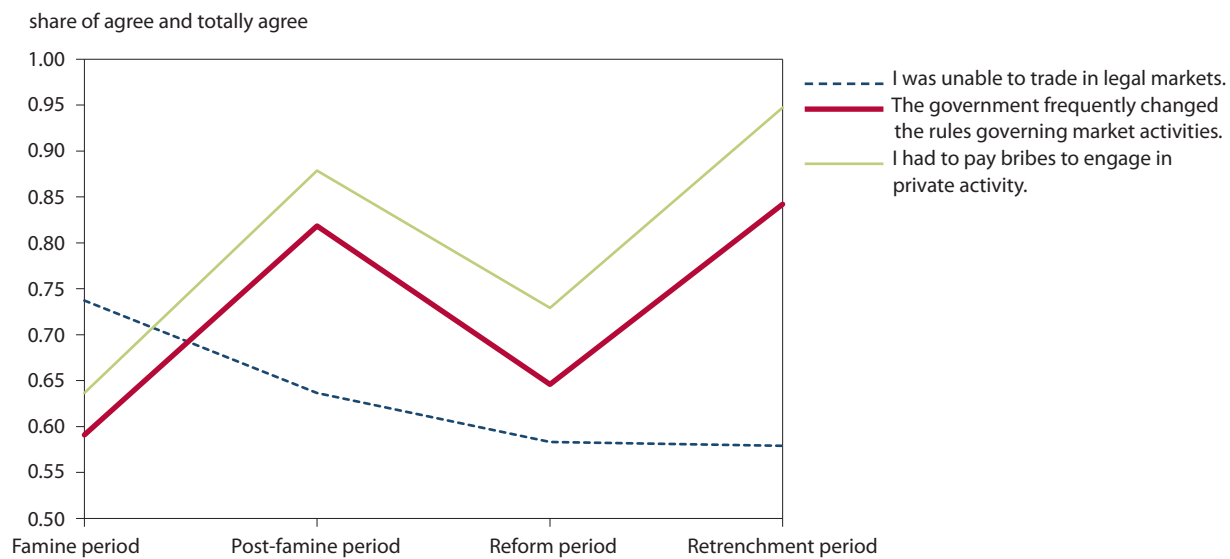
Source: Authors' calculations.

Figure 2 Share of individuals participating in private market activities



Source: Authors' calculations.

Figure 3 Women's views on the business environment



Source: Authors' calculations.