# Online Appendix

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## A The Economic Framework

#### A.1 The Market

Throughout I assume a small exporting economy under dictatorial rule. It is small in the sense that the wage level of the country does not affect the world's demand function and factor price, both of which are thus exogenously determined. This framework modifies Neary's (2003) general equilibrium model of oligopolistic competition by assuming that firms and labor are distinct players. Specifically, there is a continuum of sectors,  $z \in [0, 1]$ , and each sector has a total number of N firms in the world, of which m firms are producing onshore, and n = N - m firms are producing offshore. All firms producing onshore are identical and all firms producing offshore are also identical, while the difference between onshore firms and offshore firms lies in their cost of production, which will be made clear later.

Assume for the rest of the paper that there is initially a domestic monopoly producing onshore in each industry, which we can think of as chaebols in the case of South Korea or Suharto's relatives in the case of Indonesia, and there are no foreign firms producing onshore or domestic firms producing offshore, in which case there are N-1 potential foreign entrants prepared to move their manufacturing facilities onshore ex ante. Thus, from now on I will use N as the measure for the number of potential entrants.

The world's inverse demand function for each sector is:

$$P_z = a - bQ_z. \tag{A.1}$$

Denote  $c_z^D$  as onshore firms' marginal cost of production, which is determined endogenously and will be explained later,  $c_z^F$  as offshore firms' marginal cost of production, which is fixed and exogenous,  $q_z^D$  as each onshore firm's production, and  $q_z^F$  as each offshore firm's production, which are chosen by the firms. I assume constant marginal cost of production, which means the production cost is linear in the quantity produced. For a specific onshore firm, the profit maximization problem is the following:

$$\max_{q_z} \left[ a - b \left[ q_z + (m-1)q_z^D + nq_z^F \right] \right] q_z - c_z^D q_z,$$
(A.2)

where  $c_z^D q_z$  is the cost of producing  $q_z$  number of goods z. Notice that the assumption of a continuum of sectors (z) plays a crucial role here. Specifically, since there is a continuum of sectors, a single firm's production decsion will not affect domestic wages. Thus, firms maximize their profits as if domestic wages are fixed.

Taking derivative with respect to  $q_z$ , I obtain:

$$a - b[q_z + (m-1)q_z^D + nq_z^F] - bq_z^D - c_z^D = 0.$$

Under the assumption that all onshore firms are identical, the first-order condition gives me each onshore firm's production as a function of each offshore firm's production, which is:

$$q_{z}^{D} = \frac{a - c_{z}^{D} - nbq_{z}^{F}}{b(m+1)}.$$
(A.3)

Each offshore firm's production can be solved similarly as:

$$q_{z}^{F} = \frac{a - c_{z}^{F} - mbq_{z}^{D}}{b(n+1)}.$$
(A.4)

Solving the system of equations (A.3) and (A.4) gives me both offshore and onshore firms' production as a function of domestic and foreign marginal cost of production alone, which are

$$q_z^D = \frac{a - (n+1)c_z^D + nc_z^F}{b(n+m+1)},$$
(A.5)

$$q_z^F = \frac{a - (m+1)c_z^F + mc_z^D}{b(n+m+1)}.$$
(A.6)

#### A.2 Domestic Labor Market

I assume that labor is the only factor of production in the domestic market, and the country is endowed with L units of labor. Denote w as the domestic wage, and  $\alpha_z$  as the labor requirement per unit of production. Then the domestic marginal cost of production is equal to  $c_z^D = \alpha_z w$ . For simplicity, I assume what Neary (2003) calls a "frictionless economy", where the labor requirement per unit of production is the same across all sectors. As a result,  $\alpha_z = \alpha$  for all  $z \in [0, 1]$ , and the marginal cost of production is also the same across sectors, i.e.,  $c_z^D = c^D$  for all  $z \in [0, 1]$ .

Now, I need to clear the domestic labor market to obtain domestic wage, which gives me:

$$L = \int_0^1 \alpha_z m q_z^D dz.$$

Under the frictionless economy condition, the above equation simplifies to

$$L = \alpha m \frac{a - (n+1)w\alpha + nc^F}{b(n+m+1)},$$
(A.7)

which gives me the equilibrium domestic wage as

$$w = \frac{a + (N - m)c^F}{\alpha(N - m + 1)} - \frac{b(N + 1)}{\alpha^2(N - m + 1)m}L.$$
(A.8)

Given that equation A.1 represents the world's total demand, I assume the world's demand is large enough and thus hard to satiate.

Assumption A.1 (Large Markets).  $a > c^F + b\frac{L}{\alpha}$ .

The next result shows that, under Assumption A.1, the domestic wage is increasing in the number of onshore firms.

**Proposition A.1.** Under Assumption A.1, w is increasing in m, i.e., the domestic wage is increasing in the number of onshore firms.

Proof. Rewrite the wage as:

$$w = \frac{\alpha am + \alpha m(N-m)c^F - b(N+1)L}{\alpha^2(N-m+1)m}$$

Taking derivative with respect to m, I obtain

$$\begin{split} \frac{\partial w}{\partial m} &= \frac{1}{\left[\alpha^2 (N-m+1)m\right]^2} \left\{ \left[b(N+1)L\right] \alpha^2 (N-2m+1) + \alpha^3 m^2 (a-c^F) \right\} \\ &> \frac{1}{\left[\alpha^2 (N-m+1)m\right]^2} \left\{b(N+1)L\alpha^2 (N-2m+1) + \alpha^3 m^2 b \frac{L}{\alpha}\right\} \\ &= \frac{\alpha^2 b L}{\left[\alpha^2 (N-m+1)m\right]^2} \left[(N+1)(N-2m+1) + m^2\right] \\ &= \frac{\alpha^2 b L}{\left[\alpha^2 (N-m+1)m\right]^2} \left[N+1-m\right]^2 \\ &> 0, \end{split}$$

where the first inequality follows from Assumption A.1. Thus, the domestic wage is increasing in the number of onshore firms, as required.  $\hfill \Box$ 

#### A.3 Firm Profit

I am now ready to compute each firm's profit. The onshore firm's profit, as a function of both domestic and foreign marginal cost of production, can be written as

$$\begin{aligned} \pi_D &= q^D \bigg[ a - b(mq^D + nq^F) - c^D \bigg] \\ &= \frac{a - (n+1)c^D + nc^F}{b(n+m+1)} \bigg[ a - bm \frac{a - (n+1)c^D + nc^F}{b(n+m+1)} - bn \frac{a - (n+1)c^D + nc^F}{b(n+m+1)} - c^D \bigg] \\ &= \frac{\big[ a - (N - m + 1)c^D + (N - m)c^F \big]^2}{b(N+1)^2}. \end{aligned}$$

Substitute domestic wage w into domestic marginal cost of production,  $c^D$ , i.e.,  $c^D = \alpha w$ , I obtain

$$\pi_D = \frac{b}{m^2} \left(\frac{L}{\alpha}\right)^2,\tag{A.9}$$

from which I obtain my next proposition.

**Proposition A.2.** The profits of onshore firms,  $\pi_D$ , are independent of the number of offshore firms, n, and are decreasing in the number of onshore firms, m.

The next result compares the profits of onshore and offshore firms, where the profits of offshore firms can be calculated as

$$\pi_F = \frac{1}{b(N+1)^2} \left[ a - (m+1)c^F + mc^D \right]^2$$
$$= \frac{1}{b(n+1)^2} \left[ a - c^F - b^2 \frac{L}{\alpha} \right]^2.$$

The result hinges on  $c^D = \alpha w$  and  $c^F$ , where w is given in equation A.8.

**Proposition A.3.**  $\pi_D > \pi_F$  iff  $c^D < c^F$ , i.e., onshore firms' profits are higher than offshore firms' profits iff the domestic marginal cost of production is lower.

 $\begin{array}{l} \textit{Proof. First, note that } \pi_D - \pi_F > 0 \text{ is equivalent to} \\ & \left[a - (N - m + 1)c^D + (N - m)c^F\right]^2 > \left[a - (m + 1)c^F + mc^D\right]^2 \\ \Leftrightarrow \left[2a + (N - 2m)(c^F - c^D) - (c^F + c^D)\right] \left[(N + 1)(c^F - c^D)\right] > 0. \end{array}$   $\begin{array}{l} \text{Substitute } c^D = \alpha w, \text{I obtain, under Assumption A.1:} \\ & \left[a - (N - m + 1)c^D + (N - m)c^F\right] = \frac{b(N + 1)}{\alpha m}L > 0 \\ \text{and} \\ & \left[a - (m + 1)c^F + mc^D\right] = \frac{N + 1}{N - m + 1} \left[a - c^F - b\frac{L}{\alpha}\right] > 0. \end{array}$   $\begin{array}{l} \text{Therefore,} \\ & \left[2a + (N - 2m)(c^F - c^D) - (c^F + c^D)\right] \left[(N + 1)(c^F - c^D)\right] > 0 \\ \text{if and only if} \\ & c^F - c^D > 0, \\ \text{as required.} \end{array}$ 

#### A.4 Market Restriction

As stated earlier, there is a domestic monopoly in each industry ex ante and thus no foreign firms producing onshore. Under the monopoly regime, entry of foreign firms is fully restricted, and the domestic firms' monopoly positions are maintained. Under the free entry regime, foreign firms are allowed to enter the market and produce onshore freely. Proposition A.3 implies that foreign firms have an incentive to enter until the domestic marginal cost of production and foreign marginal cost of production are equalized, as stated in Lemma A.1.

**Lemma A.1.** The foreign and domestic marginal cost of production will be equalized when  $m^* = \frac{b\frac{L}{\alpha}}{a-c^F}(N+1)$ .

*Proof.* Set  $c^F = c^D$ , we obtain

$$c^{F} = \alpha w$$
  
= 
$$\frac{\alpha am + \alpha m(N-m)c^{F} - b(N+1)L}{\alpha(N-m+1)m},$$

from which I obtain

$$m^* = \frac{b\frac{L}{\alpha}}{a - c^F}(N+1),$$

as required.

A caveat must be made here. Although I assume that the number of firms are integers, I can always have the  $\lceil m^* \rceil$ th offshore firm mixing between entering the domestic market and not entering, which gives me an expected number of firms producing domestically as  $m^*$ .

Also note that, given a certain value of  $\frac{b\frac{L}{\alpha}}{a-c^F}$ , which is less than 1 under Assumption A.1, there might exist a value of N, say  $\underline{N}$ , such that when  $N \leq \underline{N}$ , we have  $m^* \leq 1$ . Thus, given that the offshore firms' profits are decreasing in the number of offshore firms, when the number of foreign firms is small enough, they may have already made enough profits and would rather produce offshore than producing onshore. In this case, no foreign firms enter the domestic market despite free entry.

**Proposition A.4.** Assume free entry, there exists N > 1 such that  $m^* = 1$  if and only if  $N \leq N$ , *i.e.*, foreign firms do not enter the domestic market despite free entry.

The range of N given in Proposition A.4 is theoretically uninteresting, as it is very unlikely in reality that no foreign firms would like to produce in a country where there is abundant labor supply yet very limited labor demand. Below is a table of profits and wages under different entry restriction regimes, assuming  $N > \underline{N}$ .

Restriction Regimes	Profit: $\pi_D(m N)$	Wage: $w(m N)$
Monopoly: $m = 1$	High: $b\left(\frac{L}{\alpha}\right)^2$	Low: $\frac{a+(N-1)c^F}{\alpha N} - \frac{b(N+1)}{\alpha^2 N}L$
Partial Restriction: $m \in (1, m^*)$	Medium: $\frac{b}{m^2} \left(\frac{L}{\alpha}\right)^2$	Medium: $\frac{a+(N-m)c^F}{\alpha(N-m+1)} - \frac{b(N+1)}{\alpha^2(N-m+1)m}L$
Free Entry: $m^* = \frac{b\frac{L}{\alpha}}{a-c^F}(N+1)$	Low: $\frac{(a-c^F)^2}{b(N+1)^2}$	High: $\frac{c^F}{\alpha}$

Table A.1: Profits and Wages under Different Restriction Regimes

There are several points worth emphasizing in the table. First, wages are increasing in m, the number of firms producing onshore, but profits are decreasing in m. Thus, the preferences of labor

and domestic firms are inherently opposed to each other. Second, in the first regime where the domestic firm is a monopoly (m = 1), its profit is independent of N, the total number of firms in the world. In contrast, under free entry  $(m = m^*)$ , the domestic firm's profit is decreasing in N. Thus, the more competitors out there, the more the domestic firms prefer entry restrictions. Third, while the wage is fixed under free market, the monopoly wage is decreasing in N. Thus, the more firms out there in the world, the more intense the preference of labor for free entry.

## **B Proofs**

#### **B.1** Thresholds of N

First, I define  $N^*$  as the threshold below which workers never revolt even when the dictator imposes maximal entry restriction (m = 1). I can find  $N^*$  by setting

$$\underbrace{w(m^*|N^*) - c_r}_{\text{Workers join capitalists' revolt}} = \underbrace{pw(1|N^*) + (1-p) \left[w(1|N^*) - c_s\right]}_{\text{Workers support the dictator despite capitalists' revolt}},$$

where workers are indifferent between revolting and supporting the dictator, even when capitalists decide to revolt against the dictator and the maximal level of entry restriction is imposed (m = 1). I obtain from the above equation a condition that implicitly defines  $N^*$ , where  $N^*$  can take non-integer values,

$$w(1|N^*) = w(m^*|N^*) - c_r + (1-p)c_s.$$
(B.1)

Next, I define  $N^{**} > N^*$  as the threshold such that when  $N > N^{**}$ , workers always revolt when capitalists revolt, even if the dictator allows free entry, i.e.,

$$\underbrace{w(m^*|N) - c_r}_{\text{Workers join capitalists' revolt}} = \underbrace{pw(1|N) + (1-p) \left[ w(m^*|N) - c_s \right]}_{\text{Workers support the dictator despite capitalists' revolt}}_{\text{when the dictator allows free entry } m = m^*}$$

from which I implicitly define  $N^{**}$  as

$$w(1|N^{**}) = w(m^*|N^{**}) + \frac{1-p}{p}c_s - \frac{c_r}{p}.$$
(B.2)

Note that, given Assumption 1 and 2 and the result from Table A.1 that  $w(m^*|N)$  does not depend on N, I obtain

RHS of (B.1) – RHS of (B.2) = 
$$[(1-p)c_s - c_r] - [\frac{1-p}{p}c_s - \frac{c_r}{p}]$$
  
=  $(1-\frac{1}{p})[(1-p)c_s - c_r]$   
> 0.

which implies that  $w(1|N^{**}) < w(1|N^*)$ . Since I know from Table A.1 that the monopoly wage, w(1|N), is decreasing in N, I infer that  $N^{**}$  is indeed larger than  $N^*$ . Thus, while when  $N \le N^*$  workers never revolt, when  $N > N^{**}$  workers will for sure join the revolt when capitalists decide

to revolt. Thus, if capitalists revolt, it is only possible for the dictator to buy off workers when  $N \in (N^*, N^{**}]$ .

Next, I define the threshold  $N^{***}$  such that when  $N > N^{***}$ , workers will revolt alone when m = 1, i.e.,

$$\underbrace{pw(m^*|N^{***}) + (1-p) \left[w(1|N^{***}) - c_s\right] - c_r}_{\text{Workers revolt alone when the dictator imposes}} = \underbrace{w(1|N^{***}) - c_s}_{\text{Workers support the dictator}},$$

from which I implicitly define  $N^{***}$  as

$$w(1|N^{***}) = w(m^*|N^{***}) + c_s - \frac{c_r}{p}.$$
(B.3)

Note again that, given Assumption 1 and 2, I have

RHS of (B.2) – RHS of (B.3) = 
$$\left[\frac{1-p}{p}c_s - \frac{c_r}{p}\right] - \left[c_s - \frac{c_r}{p}\right]$$
  
=  $\left(\frac{1}{p} - 2\right)c_s$   
> 0.

Thus, I obtain  $w(1|N^{***}) < w(1|N^{**})$ , which, given w(1|N) decreases in N, implies  $N^{***} > N^{**}$ .

I next define a similar threshold for capitalists. First, notice that the condition that capitalists never revolt alone even when the dictator expropriates everything from them does not depend on N, i.e.,

$$\underbrace{p\pi(1|N) + (1-p)(-c_s) - c_r}_{\text{Captalists revolt alone when being fully expropriated}} \leq \underbrace{0 - c_s}_{\text{Support the dictator}}$$

from which I obtain

$$\pi(1|N) \le \frac{c_r}{p} - c_s$$

which, given the result in Table A.1, does not depend on N.

I next define the threshold, N', such that when  $N \ge N'$ , capitalists never revolt even when they are fully expropriated and workers revolt for sure, i.e.,

$$\underbrace{\pi(m^*|N') - c_r}_{\text{Capitalists join workers' revolt}} = \underbrace{p\pi(m^*|N') + (1-p)(-c_s)}_{\text{Capitalists support the dictator}},$$

from which I obtain

$$\pi(m^*|N') = \frac{c_r}{1-p} - c_s.$$
(B.4)

#### **B.1.1** Domestic Labor Supply and the Thresholds

The next result illustrates the relationship between domestic labor supply, L, and the various thresholds of potential FDI. It demonstrates that as domestic labor supply increases, all the thresholds of

N ( $N^*$ ,  $N^{**}$  and  $N^{***}$ ) tend to decrease. In fact, they all decrease at exactly the same rate as L increases.

**Lemma B.1.**  $\frac{\partial N^*}{\partial L} = \frac{\partial N^{**}}{\partial L} = \frac{\partial N^{***}}{\partial L} < 0.$ 

*Proof.* The proof is done by using Implicit Function Theorem. Notice that from equations B.1, B.2 and B.3, I obtain

$$\frac{\partial N^*}{\partial L} = \frac{\partial N^{**}}{\partial L} = \frac{\partial N^{***}}{\partial L} = -\frac{\frac{\partial w(1|N)}{\partial L}}{\frac{\partial w(1|N)}{\partial N}}.$$
  
Now, given that  $\frac{\partial w(1|N)}{\partial N} < 0$  and  $\frac{\partial w(1|N)}{\partial L} < 0$ , I know that  $\frac{\partial N^*}{\partial L} = \frac{\partial N^{***}}{\partial L} = \frac{\partial N^{***}}{\partial L} < 0$ , as required.

As Figure B.1 illustrates, as domestic labor supply increases from L to L', all the thresholds of N will decrease by the same amount. Thus, what increasing labor supply effectively does is to reduce the range of N in which workers never revolt, while increasing the range of N in which workers may revolt alone. In other words, it becomes more difficult for the dictator to buy off workers as L increases, even if the probability of a successful working class revolt, p, remains the same.

The result is quite intuitive. As higher labor supply reduces domestic wages even further under the monopoly regime (Table A.1), the benefits from FDI liberalization for the working class becomes even greater. As a result, they are more likely to revolt and thus harder to be appeased.

#### **Figure B.1: Thresholds of** N **for** L' > L



#### **B.2 Proofs for Section 4.2**

I first define a liberalization level under dictatorship,  $m_U^W$ , such that when  $N \in (N^*, N^{**}]$  and capitalists choose to revolt, workers are indifferent between joining and not joining the revolt, i.e.,

$$Eu_W(a_W = 1 | a_C = 1, a_D = 0, m = m_U^W, \phi) = Eu_W(a_W = 0 | a_C = 1, a_D = 0, m = m_U^W, \phi),$$

from which I can define  $m_U^W$  implicitly as

$$w(m_U^W|N) \equiv \frac{w(m^*|N)}{1-p} - \frac{p}{1-p}w(1|N) - \frac{c_r}{1-p} + c_s.$$
(B.5)

*Proof of Proposition 1.* I start by proving part (1) of the proposition. Given that workers never revolt, the dictator will offer capitalists maximal protection by always setting m = 1 in order

to extract maximal amount of rents. Note that given  $N^{**} < N'$ , capitalists will indeed revolt if their assets are being expropriated.

Thus, capitalists will revolt if

$$\underbrace{(1-\phi)\pi(1|N)-c_s}_{\text{Capitalists support the dictator}} < \underbrace{p\pi(1|N) + (1-p)\left[(1-\phi)\pi(1|N)-c_s\right] - c_r}_{\text{Capitalists revolt alone}},$$

from which I obtain

$$\phi\pi(1|N) > \frac{c_r}{p} - c_s.$$

Thus, to ensure the cooperation of capitalists, the rents the dictator demands from them cannot exceed  $\frac{c_r}{p} - c_s$ . Now it is clear that given  $p < \frac{1}{2}$  and  $\frac{c_r}{1-p} - c_s > 0$ , we have  $\frac{c_r}{p} - c_s > 0$ . As a result, the dictator can always make capitalists indifferent between revolting and not revolting.

Thus, the dictator can either choose to make capitalists indifferent between revolting and not revolting, i.e., demanding  $\frac{c_r}{p} - c_s$  from capitalists, or demanding the maximum amount of rent possible from capitalists,  $\pi(1|N)$ , and risking being deposed by them, which gives the dictator a payoff of  $(1 - p)\pi(1|N) - pc_d$ , depending on which option is optimal.

I next prove part (2) of the proposition. Again notes that capitalists will indeed revolt if being fully expropriated. Thus, the dictator needs to choose whether to retain the support of capitalists, which as a result of  $N \leq N^{**}$ , also gives the dictator the support of workers, or to retain the support of workers alone.

If the dictator decides to obtain the support of both capitalists and workers, there are two scenarios. One scenario is that the dictator does not buy off workers, in which case the dictator can extract the maximal amount of rents by setting m = 1. Or the dictator can buy off workers, in which case she can extract the maximal amount of rents from capitalists by setting  $m = m_U^W$ . In the former case, to avoid a capitalists' revolt, the dictator has to make capitalists better off under dictatorship than under democracy even if the dictator will be deposed with probability 1,

$$\underbrace{\pi(m^*|N) - c_r}_{\text{Both capitalists and workers revolt}} \leq \underbrace{(1 - \phi)\pi(1|N) - c_s}_{\text{No one revolts}}$$

from which I obtain  $\phi \pi(1|N) \leq \pi(1|N) - [\pi(m^*|N) + c_s - c_r]$ . Thus, to gain the support of capitalists, the maximum amount of rents the dictator is able to get is  $\pi(1|N) - [\pi(m^*|N) + c_s - c_r]$ . In the latter case, the condition to avoid a capitalists' revolt is

$$\underbrace{p\pi(1|N) + (1-p)\left[(1-\phi)\pi(m_U^W|N) - c_s\right] - c_r}_{\text{Capitalists revolt alone}} \leq \underbrace{(1-\phi)\pi(m_U^W|N) - c_s}_{\text{No one revolts}},$$

from which I obtain  $\phi \pi(m_U^W|N) \leq \pi(m_U^W|N) - \pi(1|N) + \frac{c_r}{p} - c_s$ .

If the dictator chooses to expropriate everything from capitalists and thus risking a capitalists' revolt, it means that she has to obtain the support of workers, otherwise the dictator will be deposed for sure. To obtain workers' support, the dictator needs to make workers better off by not joining the revolt with capitalists, which implies that the dictator has to set  $m = m_U^W$ . As a result, obtaining the support of workers alone will give the dictator a payoff of  $-pc_d + (1-p)\pi(m_U^W).$ 

Thus, when  $N \in (N^*, N^{**}]$ , the dictator can either obtain the support of both capitalists and workers, or expropriate all the assets of capitalists while obtaining the support of workers alone by partially liberalizing the market, depending on which option is optimal.

*Proof of Proposition 2.* First, notice that under dictatorship, the expected payoff for the dictator from expropriating everything from capitalists is

$$Eu_D(a_D = 0, \text{full expropriation}|N) = \begin{cases} (1-p)\pi(1|N) - pc_d & \text{when } N \le N^*, \\ (1-p)\pi(m_U^W|N) - pc_d & \text{when } N \in (N^*, N^{**}], \end{cases}$$

while the expected payoff from making both players indifferent is

$$Eu_D(a_D = 0, \text{ no revolt}|N) = \begin{cases} \frac{c_r}{p} - c_s & \text{when } N \le N^*, \\ \max\left\{\pi(m_U^W|N) - \pi(1|N) + \frac{c_r}{p} - c_s, \\ \pi(1|N) - \left[\pi(m^*|N) + c_s - c_r\right]\right\} & \text{when } N \in (N^*, N^{**}]. \end{cases}$$

Now, I first show that  $m_U^W$  is increasing in N. This can be shown by using Implicit Function Theorem. Since  $m_U^W$  is defined by  $w(m_U^W|N) \equiv \frac{w(m^*|N)}{1-p} - \frac{p}{1-p}w(1|N) - \frac{c_r}{1-p} + c_s$ , and  $w(m^*|N)$  is unchanged in either N or m, I just need to show that  $\frac{\partial m}{\partial N} = -\frac{\frac{\partial [w(m|N) + \frac{p}{1-p}w(1|N)]}{\frac{\partial [w(m|N) + \frac{p}{1-p}w(1|N)]}{\partial N}}}{\frac{\partial [w(m|N) + \frac{p}{1-p}w(1|N)]}{\partial N}} > 0.$ 

Now, I show in the proof of Proposition A.1 that  $\frac{\partial w}{\partial m} > 0$ , which implies that  $\frac{\partial [w(m|N) + \frac{p}{1-p}w(1|N)]}{\partial m} = \frac{\partial w}{\partial m} > 0$ . So all I need to show is that  $\frac{\partial [w(m|N) + \frac{p}{1-p}w(1|N)]}{\partial N} < 0$ . Notice that I know from Table A.1 that  $\frac{\partial w(1|N)}{\partial N} < 0$ , thus, it is sufficient to show that  $\frac{\partial w}{\partial N} < 0$ . Write the partial derivative as

$$\frac{\partial w}{\partial N} = \frac{m^2 \alpha^2}{\alpha^4 (N - m + 1)^2 m^2} \left[ bL + \alpha (c^F - a) \right].$$

By Assumption A.1, we know that  $[bL + \alpha(c^F - a)] < 0$ . Thus,  $\frac{\partial w}{\partial N} < 0$ , i.e.,  $m_U^w$  is increasing in N. Thus, as N increases,  $m_U^W$  increases, which leads to a decrease in  $(1-p)\pi(m_U^W|N) - pc_d$ , as required.

Now, notice that the number of entrants under free entry,  $m^*(N) = \frac{b_{\alpha}^L}{a-c^F}(N+1)$ , is increasing in N. Also notice that  $\pi_D(m=1|N) = b(\frac{L}{\alpha})^2$  is unchanged in N while  $\pi_D(m=m^*|N) = \frac{(a-c^F)^2}{b(N+1)^2}$  is decreasing in N. As a result,  $\pi(m_U^W|N) - \pi(1|N) + \frac{c_r}{p} - c_s$  is clearly decreasing in N while  $\pi(1|N) - [\pi(m^*|N) + c_s - c_r]$  is increasing in N. Thus, whether  $u_D(a_D = 0, \text{ no revolt}|N)$  is increasing or decreasing in N over  $(N^*, N^{**}]$  depends on which of the two terms is larger.

When  $(\frac{1}{p}-1)c_r < 2\pi(1|N^*) - \pi(m_U^W|N^*) - \pi(m^*|N^*)$ , it is clear that the minimum value of  $\pi(1|N) - [\pi(m^*|N) + c_s - c_r]$  is greater than the maximum value of  $\pi(m_U^W|N) - \pi(1|N) + c_s - c_r$ 

 $\begin{array}{l} \frac{c_r}{p}-c_s \mbox{ over } (N^*,N^{**}]. \mbox{ As a result, } u_D(a_D=0,\mbox{ no revolt}|N)=\pi(1|N)-\left[\pi(m^*|N)+c_s-c_r\right] \mbox{ is increasing in } N. \mbox{ When } (\frac{1}{p}-1)c_r>2\pi(1|N^*)-\pi(m_U^W|N^{**})-\pi(m^*|N^{**}),\mbox{ the maximum value of } \pi(1|N)-\left[\pi(m^*|N)+c_s-c_r\right] \mbox{ is smaller than the minimum value of } \pi(m_U^W|N)-\pi(1|N)+\frac{c_r}{p}-c_s.\mbox{ As a result, } u_D(a_D=0,\mbox{ no revolt}|N)=\pi(m_U^W|N)-\pi(1|N)+\frac{c_r}{p}-c_s \mbox{ is decreasing in } N. \mbox{ When } 2\pi(1|N^{**})-\pi(m_U^W|N^{**})-\pi(m^*|N^{**})\geq (\frac{1}{p}-1)c_r\geq 2\pi(1|N^*)-\pi(m_U^W|N^*)-\pi(m_U^W|N^*)-\pi(m_U^W|N)+c_s-c_r \mbox{ is greater when } N \mbox{ is large, while } \pi(m_U^W|N)-\pi(1|N)+\frac{c_r}{p}-c_s \mbox{ is greater when } N \mbox{ is small. As a result, } u_D(a_D=0,\mbox{ no revolt}|N) \mbox{ first decreases then increases in } N. \end{array}$ 

#### **B.3 Proofs for Section 4.3**

I begin this section by implicitly defining another threshold for liberalization,  $m_L^W$ , such that workers are indifferent between revolting alone and not revolting, i.e.,

$$w(m_L^W|N) \equiv w(m^*|N) - \frac{c_r}{p} + c_s.$$
 (B.6)

Proof of Proposition 3. I first prove part (1) of the proposition. Given a pair (m, N) and the fact  $N > N^{**}$ , if capitalists revolt, workers will join the revolt for sure. As a result, it is never optimal for the dictator to provoke a capitalists' revolt. At the same time, given  $N \le N^{***}$ , workers will never revolt alone. Thus, the dictator can impose entry restrictions freely without fear of a workers' revolt. Thus, to extract the maximal amount of rents from capitalists, the dictator always imposes the maximal entry restriction, i.e., m = 1.

Now, capitalists, knowing that workers will join their revolt for sure, will not initiate a revolt as long as the following holds,

$$\underbrace{\pi(m^*|N) - c_r}_{\text{Capitalists revolt with workers' support}} \leq \underbrace{(1 - \phi)\pi(1|N) - c_s}_{\text{No revolt}},$$

which is equivalent to

$$\phi \pi(m|N) \ge \pi(m|N) - [\pi(m^*|N) + c_s - c_r].$$

Thus, under dictatorship, the dictator will set m = 1 and demand  $\phi \pi(m|N) = \pi(m|N) - [\pi(m^*|N) + c_s - c_r]$  from capitalists, as required.

For part (2), notice that given  $N > N^{***} > N^{**}$ , there can be three possibilities under dictatorship: workers revolt alone, no one revolts, or both players revolt.

It is clear that the dictator never wants the third scenario to happen. In the first scenario, the dictator will extract the maximal amount of rents from capitalists by imposing maximal entry restriction, m = 1. To retain the support of capitalists, it has to be better off for the capitalists

to support the dictator than to joing the working class revolt, i.e.,

$$\underbrace{\pi(m^*|N) - c_r}_{\text{right trian worker's much set}} \leq \underbrace{p\pi(m^*|N) + (1-p)\left[(1-\phi)\pi(1|N) - c_s\right]}_{\text{right trian worker's much set}},$$

Capitalists join workers' revolt

from which I obtain

$$\phi \pi(1|N) \le \pi(1|N) - \left[\pi(m^*|N) + c_s - \frac{c_r}{1-p}\right].$$

As a result, the expected payoff for the dictator is

$$Eu_D(\text{workers revolt}|N) = (1-p) \left[ \pi(1|N) - \left[ \pi(m^*|N) + c_s - \frac{c_r}{1-p} \right] \right] - pc_d.$$
(B.7)

In the second scenario, in order to avoid a working class revolt, workers need to be better off supporting the dictator than revolting alone, i.e.,

$$\underbrace{pw(m^*|N) + (1-p) \big[ w(m|N) - c_s \big] - c_r}_{\text{Workers revolt alone}} \leq \underbrace{w(m|N) - c_s}_{\text{No one revolts}},$$

from which I obtain

$$w(m|N) \ge w(m_L^W|N) \equiv w(m^*|N) - \frac{c_r}{p} + c_s.$$

Thus, the maximal entry restriction the dictator is able to impose in the second scenario is  $m = m_L^W$ . In order to also retain the support of capitalists, capitalists need to be better off supporting the dictator than revolting, which will for sure bring workers to join the revolt as well, i.e.,

$$\underbrace{\pi(m^*|N) - c_r}_{\text{Both capitalists and workers revolt}} \leq \underbrace{(1 - \phi)\pi(m_L^W) - c_s}_{\text{No one revolts}},$$

from which I obtain

$$\phi \pi(m_L^W) \le \pi(m_L^W) - [\pi(m^*|N) + c_s - c_r].$$

Thus, the expected payoff for the dictator in the second scenario is

$$Eu_D(\text{no revolt}|N) = \pi(m_L^W) - [\pi(m^*|N) + c_s - c_r].$$
 (B.8)

This proves part (2) of the proposition. For part (3), consider first

$$Eu_D(\text{working class revolt}) = (1-p) \left[ \pi(1|N) - \left[ \pi(m^*|N) + c_s - \frac{c_r}{1-p} \right] \right] - pc_d.$$

Given that  $\pi(1|N)$  is constant in m and N, while  $\pi(m^*|N)$  is decreasing in m and  $m^*$  is increasing in N, as shown in Table A.1, I know that  $\pi(m^*|N)$  is decreasing in N, which implies that  $Eu_D$  (working class revolt |N) is increasing in N.

For  $u_D(m = m_L^W$ , no revolt), let's just consider  $\pi(m_L^W) - \pi(m^*)$ . First, notice that  $|w(m_L^W) - w(m^*)|$  is by definition fixed and equal to  $-\frac{c_r}{p} + c_s$ . Second, notice that from Proposition A.1, I obtain

$$|\frac{\partial w}{\partial m}| = |\frac{bL}{\alpha^2 m^2}|,\tag{B.9}$$

while from Table A.1 I obtain

$$\frac{\partial \pi}{\partial m} | = \frac{2bL^2}{\alpha^2 m^3} |. \tag{B.10}$$

As a result, I know that

$$\frac{\left|\frac{\partial \pi}{\partial m}\right|}{\left|\frac{\partial w}{\partial m}\right|} = \frac{2L}{m},\tag{B.11}$$

i.e., as *m* increases,  $\pi(.)$  becomes less sensitive to *m* relative to w(.). Recall that  $m^*$  is increasing in *N*. Thus,  $\pi(m_L^W) - \pi(m^*)$  decreasing in *N* is equivalent to  $\pi(m_L^W) - \pi(m^*)$  decreasing in  $m^*$ .

Now, suppose to the contrary that  $\pi(m_L^W)-\pi(m^*)$  is increasing in  $m^*,$  I obtain

$$\frac{\partial \pi(m_L^W)}{\partial m_L^W} \frac{\partial m_L^W}{\partial m^*} - \frac{\partial \pi(m^*)}{\partial m^*} > 0,$$

which, given  $\frac{\partial \pi(m)}{\partial m} < 0$  and  $\frac{\partial m_L^W}{\partial m^*} > 0$ , is equivalent to

$$\left|\frac{\partial \pi(m^*)}{\partial m^*}\right| > \left|\frac{\partial \pi(m_L^W)}{\partial m_L^W}\right| \frac{\partial m_L^W}{\partial m^*} \tag{B.12}$$

Now, given  $|w(m_L^W) - w(m^*)|$  is fixed, I know

$$\frac{\partial w(m^*)}{\partial m^*} = \frac{\partial w(m_L^W)}{\partial m_L^W} \frac{\partial m_L^W}{\partial m^*}.$$
(B.13)

Combining equations B.12 and B.13, I obtain

$$\frac{\left|\frac{\partial \pi(m^*)}{\partial m^*}\right|}{\left|\frac{\partial w(m^*)}{\partial m^*}\right|} > \frac{\left|\frac{\partial \pi(m_L^W)}{\partial m_L^W}\right|}{\left|\frac{\partial w(m_L^W)}{\partial m_L^W}\right|}$$

However, I know that  $\frac{\left|\frac{\partial \pi}{\partial m}\right|}{\left|\frac{\partial w}{\partial m}\right|}$  is decreasing in m and  $m^* > m_L^W$ . Contradiction. Thus, both  $\pi(m_L^W) - \pi(m^*)$  and  $u_D(m = m_L^W, \text{ no revolt})$  are decreasing in N, as required.

#### **B.4** Outside Option for Capitalists in the Age of Globalization

In this section, I assume that domestic capitalists have the option of exiting the country by moving abroad in the age of globalization  $(N > N^{**})$ , which gives them an exogenous payoff of  $B_F < \pi(m^*|N)$ , where F stands for "flight". As the example of France under Mitterrand shows (Pond 2018), capital flight tends to trigger economic crisis, severely reducing workers' income. Thus, I assume that workers' payoff under capital flight,  $W_F$ , is low enough such that they always revolt against the dictator when it happens.

Assumption B.1. (1)  $B_F < \pi(m^*|N)$ ; (2)  $W_F < w(1|N)$ .

If the working class revolt succeeds, democracy will follow. Given  $B_F < \pi(m^*|N)$ , domestic capitalists would return following a successful working class revolt and obtain a payoff of  $\pi(m^*|N)$ .

For the dictator, after capitalists exit the country, she is not able to expropriate anything from them. However, the dictator still needs to face the working class revolt, which gives her an expected payoff of  $-pc_d < 0$  under dictatorship. Thus, the dictator would never want capitalists to flee. In other words, the dictator may face an expropriation constaint.

The next result describes what the equilibrium looks like under dictatorship when capitalists can exit.

#### Proposition B.1. Under dictatorship,

- 1. When  $N \in (N^{**}, N^{***}]$ , the dictator maintains maximal entry restrictions (m = 1) and demands  $\phi \pi(1|N) = \pi(1|N) - c_s - \max\{B_F, \pi(m^*|N) - c_r\}$  from capitalists. Both capitalists and workers support the dictator.
- 2. When  $N > N^{***}$ , the dictator either maintains maximal entry restrictions (m = 1), and then workers revolt; or she partially liberalizes entry  $(m = m_L^W)$  to make workers indifferent and retain their support. In the first case, the dictator demands  $\phi \pi(1|N) = \min\{\pi(1|N) - [\pi(m^*|N) + c_s - \frac{c_r}{1-p}], \frac{p}{1-p}\pi(m^*|N) + \pi(1|N) - c_r - \frac{B_F}{1-p}\}$  from capitalists, while in the second case, he demands  $\phi \pi(m_L^W) = \pi(m_L^W) - c_s - \max\{B_f, \pi(m^*|N) - c_r\}$  from capitalists.

*Proof.* I first prove part (1) of the proposition. Same as the arguments in the proof of Proposition 3, part (1), the dictator always imposes the maximal entry restriction, i.e., m = 1, when  $N \in (N^{**}, N^{***}]$ . However, now the dictator does not want capitalists to either join the working class revolt or exit, implying that capitalists' utility from supporting the dictator must be higher than from both options. In other words,

$$(1-\phi)\pi(1|N) - c_s \ge \max\{B_F, \pi(m^*|N) - c_r\},\$$

which gives me

$$\phi \pi(1|N) \le \pi(1|N) - c_s - \max\{B_F, \pi(m^*|N) - c_r\}$$

For part (2), the dictator again has two options, either letting workers revolt alone, or retaining both capitalists' and workers' support. In the first scenario, the dictator will again extract the maximal amount of rents from capitalists by imposing maximal entry restriction, m = 1. To retain the support of capitalists, it has to be better off for capitalists to support the dictator than either to join the working class revolt or to exit, i.e.,

$$\pi(m^*|N) - c_r \le p\pi(m^*|N) + (1-p) \big[ (1-\phi)\pi(1|N) - c_s \big],$$

and

$$B_F \le p\pi(m^*|N) + (1-p)[(1-\phi)\pi(1|N) - c_s],$$

which gives me

$$\phi\pi(1|N) = \min\left\{\pi(1|N) - \left[\pi(m^*|N) + c_s - \frac{c_r}{1-p}\right], \frac{p}{1-p}\pi(m^*|N) + \pi(1|N) - c_r - \frac{B_F}{1-p}\right\}.$$

In the second scenario, in order to avoid a working class revolt, the dictator will again partially liberalize entry restriction by setting  $m = m_L^W$ . In order to also retain the support of capitalists, capitalists need to be better off supporting the dictator than either revolting or exiting, i.e.,

$$\pi(m^*|N) - c_r \le (1 - \phi)\pi(m_L^W) - c_s,$$

and

$$B_F \le (1-\phi)\pi(m_L^W) - c_s,$$

which gives me

$$\phi \pi(m_L^W) = \pi(m_L^W) - c_s - \max\{B_f, \pi(m^*|N) - c_r\},$$

as required.

Notice first that, given that  $\pi(m^*|N)$  decreases in N, the expropriation constraint becomes more likely to bind as the amount of potential FDI inflows become large. Also notice that the form of equilibrium looks exactly the same as in the case in which capitalists cannot move abroad. The difference, however, lies in the dictator's incentives of using different equilibrium strategies.

#### Proposition B.2. Under dictatorship,

- 1. If  $c_r > c_s$ , then
  - (a) When  $B_F < \pi(m^*|N) (1-p)(c_r c_s) c_r$ , the expropriation constraint does not bind. The payoffs for the dictator from both the full FDI restriction strategy (m = 1)and the partial FDI restriction strategy  $(m = m_L^W)$  remain the same as in the case in which capitalists have no outside option;
  - (b) When  $B_F \in \left(\pi(m^*|N) (1-p)(c_r c_s) c_r, \pi(m^*|N) c_r\right)$ , the expropriation constaint binds only for the full FDI restriction strategy. Thus, the payoff for the dicta-

tor from the full FDI restriction strategy is lower than in the case in which capitalists have no outside option;

- (c) When  $B_F > \pi(m^*|N) c_r$ , the expropriation constaint binds for both the full FDI restriction strategy and the partial FDI restriction strategy. Thus, the payoffs for the dictator from both the full FDI restriction strategy and the partial FDI restriction strategy are lower than in the case in which capitalists have no outside option.
- 2. If  $c_r < c_s$ , then
  - (a) When  $B_F < \pi(m^*|N) c_r$ , the expropriation constraint does not bind. The payoffs for the dictator from both the full FDI restriction strategy and the partial FDI restriction strategy remain the same as in the case in which capitalists have no outside option;
  - (b) When  $B_F \in (\pi(m^*|N) c_r, \pi(m^*|N) (1-p)(c_r c_s) c_r)$ , the expropriation constaint binds only for the partial FDI restriction strategy. Thus, the payoff for the dictator from the partial FDI restriction strategy is lower than in the case in which capitalists have no outside option;
  - (c) When  $B_F > \pi(m^*|N) (1-p)(c_r c_s) c_r$ , the expropriation constaint binds for both the full FDI restriction strategy and the partial FDI restriction strategy. Thus, the payoffs for the dictator from both the full FDI restriction strategy and the partial FDI restriction strategy are lower than in the case in which capitalists have no outside option.
- 3. If the expropriation constaint binds for the full expropriation strategy, the dictator's payoff from imposing maximal entry restrictions (m = 1) decreases in N. In any case, the dictator's payoff from partial liberalization ( $m = m_L^W$ ) always decreases in N.

*Proof.* I first prove part 1 of the proposition, and the proof for part 2 is the same. Note that the dictator's payoff from the full FDI restriction strategy under dictatorship is

$$p\phi\pi(1|N) - (1-p)c_d =$$

 $p\min\{\pi(1|N) - \left[\pi(m^*|N) + c_s - \frac{c_r}{1-p}\right], \frac{p}{1-p}\pi(m^*|N) + \pi(1|N) - c_r - \frac{B_F}{1-p}\} - (1-p)c_d.$ 

In other words, the exit option binds when  $B_F \ge \pi(m^*|N) - (1-p)(c_r - c_s) - c_r$ .

Similarly, the dictator's payoff from the partial FDI restriction strategy under dictatorship is

$$\phi \pi(m_L^W) = \pi(m_L^W) - c_s - \max\{B_F, \pi(m^*|N) - c_r\}.$$

Thus, the exit option binds when  $B_F \ge \pi(m^*|N) - c_r$ .

Given that  $c_r > c_s$ , we know that  $\pi(m^*|N) - (1-p)(c_r - c_s) - c_r < \pi(m^*|N) - c_r$ . This proves part 1.

As for part 3, notice that if the expropriation constaint binds, the dictator's payoff from the full expropriation strategy is

$$p\phi\pi(1|N) - (1-p)c_d = p\left[\frac{p}{1-p}\pi(m^*|N) + \pi(1|N) - c_r - \frac{B_F}{1-p}\right] - (1-p)c_d.$$

From Table A.1, we know that  $\pi(1|N)$  is fixed w.r.t N while  $\pi(m^*|N)$  decreases in N. Thus,  $p\phi\pi(1|N) - (1-p)c_d$  decreases in N, as required.

Next, notice that if the expropriation constaint binds, the dictator's payoff from the partial expropriation strategy is

$$\phi\pi(m_L^W) = \pi(m_L^W) - c_s - B_F$$

Now, as shown in the proof of Proposition 3,  $m_L^W$  increases in N. Thus,  $\phi \pi(m_L^W)$  decreases in N, as required.

The above results say several things. First, the dictator's expected payoff under dictatorship when capitalists can exit cannot be higher than when capitalists cannot exit, as the dictator is not able to expropriate as much from capitalists as before. As a result, the likelihood of the dictator choosing to democratize preemptively is at least as high as in the case with no exit option for capitalists.

What's more, as N becomes large such that the expropriation constraint binds for the full FDI restriction strategy, further increase in the amount of potential FDI inflows, N, will decrease the dictator's payoff from the full FDI restriction strategy, which will increase the likelihood of the dictator democratizing preemptively even further. The intuition behind the result is the following. First, as N increases, capitalists' payoff from a successful working class revolt decreases due to the increasingly intensive competition they will face under democracy. As a result, as N increases, their expected payoff under dictatorship from the full restriction strategy decreases due to the possibility of a successful working class revolt, even if the amount of rents demanded by the dictator remains constant. Second, given that capitalists now have the option of exiting and getting a fixed payoff of  $B_F$ , the relative benefit from the dictator's protection decreases. As a result, the dictator is not able to extract as much rents from capitalists as N increases, reducing the dictator's payoff from the full restriction strategy.

However, the inability to expropriate capitalists due to the availability of exit option may also reduce the dictator's incentive to offer capitalists full protection by fully restricting FDI inflows. As a result, as capitalists' payoff from exiting increases, the dictator may be less likely to adopt the full FDI restriction strategy that induces the working class to revolt. This is illustrated in point 1 (b) of Proposition B.2, where the dictator's payoff from the full FDI restriction strategy becomes lower as the expropriation constaint becomes binding for the full restriction strategy. As a result, the dictator becomes less likely to exploit the working class due to her inability to expropriate capitalists, reducing the likelihood of a working class revolt.

#### **B.5** Expropriation of Foreign Firms

Will the ability to expropriate foreign firms change the dictator's incentives of imposing FDI restrictions? Indeed, if the dictator can extract rents from foreign entrants through either direct extortion or taxation, the dictator may be able to extract more rents by allowing some foreign firms to enter and produce onshore. However, the next result demonstrates that allowing foreign firms

to produce onshore always reduces the amount of rents the dictator can extract from the economy depsite the dictator's ability to expropriate foreign firms. In other words, the key tensions between the dictator, who would like to impose full FDI restrictions, and workers, who would like to have full FDI liberalization, remain unchanged.

**Proposition B.3.** Suppose the dictator can expropriate foreign firms producing onshore, then the dictator's rent-maximizing strategy is full FDI restrictions regardless of whether the dictator retains capitalists' support.

*Proof.* Suppose there are m firms producing on shore, of which m-1 are foreign firms. The maximal amount of rents the dictator can extract from foreign firms is to make each foreign firm indifferent between producing onshore and offshore, i.e.,  $\frac{b}{m^2} \left(\frac{L}{\alpha}\right)^2 - \frac{1}{b((N-m+1)+1)^2} \left[a - c^F - b^2 \frac{L}{\alpha}\right]^2$ . Thus, the total amount of rents the dictator can extract from foreign firms, conditional

 $b^2 \frac{L}{\alpha}$ ]. Thus, the total amount of rents the dictator can extract from foreign firms, conditional on the number of firms (*m*) producing onshore, is

$$R_F(m) = (m-1) \left\{ \frac{b}{m^2} \left(\frac{L}{\alpha}\right)^2 - \frac{1}{b((N-m+1)+1)^2} \left[a - c^F - b^2 \frac{L}{\alpha}\right]^2 \right\}$$

Now, if the dictator fully expropriates capitalists, the amount of rents the dictator can extract from domestic firms is

$$R_D(m) = \frac{b}{m^2} \left(\frac{L}{\alpha}\right)^2,$$

while if the dictator retains capitalists' support, the amount of rents the dictator can extract from domestic firms is

$$R_D(m) = \frac{b}{m^2} \left(\frac{L}{\alpha}\right)^2 - b(\frac{L}{\alpha})^2 - c_s + \frac{c_r}{p},$$
$$R_D(m) = \frac{b}{m^2} \left(\frac{L}{\alpha}\right)^2 - \frac{(a - c^F)^2}{b(N+1)^2} - c_s + c_r$$

or

$$R_D(m) = \frac{b}{m^2} \left(\frac{L}{\alpha}\right)^2 - \frac{(a-c^F)^2}{b(N+1)^2} - c_s + \frac{c_r}{1-p},$$

depending on whether workers will never revolt ( $N \leq N^*$ ), will join capitalists' revolt ( $N \in (N^*, N^{***}]$ ), or will revolt alone ( $N > N^{***}$ ), respectively.

In any case, we can write the dictator's rents from domestic firms as

$$R_D(m) = \frac{b}{m^2} \left(\frac{L}{\alpha}\right)^2 - E_D, \qquad (B.14)$$

where  $E_D$  does not depend on m.

Thus, the total amount of rents the dictator can extract from the economy, conditional on

m, is

$$R = \frac{b}{m} \left(\frac{L}{\alpha}\right)^2 - \frac{m-1}{b((N-m+1)+1)^2} \left[a - c^F - b^2 \frac{L}{\alpha}\right]^2 - E_D.$$
 (B.15)

Taking derivative with respect to m, I obtain

$$\frac{\partial R}{\partial m} = -b\left(\frac{L}{\alpha}\right)^2 \frac{1}{m^2} - \frac{\left[a - c^F - b^2 \frac{L}{\alpha}\right]^2}{b} \frac{N + m}{(N - m + 2)^3} < 0.$$
(B.16)

Thus, the dictator's rent-maximizing strategy is to impose full FDI restrictions, as required.

#### **B.6 Relaxing Assumption 2**

In this section, I analyze a version of the game in which Assumption 2 is relaxed. That is, the societal cost is so high such that workers always revolt. The next result shows that, when workers always revolt, the dictator would always impose full FDI restrictions while extracting just enough rents from capitalists to make capitalists indifferent whenever possible.

**Proposition B.4.** Suppose  $c_s \geq \frac{c_r}{1-p}$ , then workers always revolt.

- When  $\pi(1|N) \pi(m^*|N) c_s + \frac{c_r}{1-p} > 0$ , the dictator imposes full FDI restrictions (m = 1) and extracts  $\pi(1|N) \pi(m^*|N) c_s + \frac{c_r}{1-p}$  from capitalists. Capitalists support the dictator;
- When  $\pi(1|N) \pi(m^*|N) c_s + \frac{c_r}{1-p} \leq 0$ , capitalists always revolt.

*Proof.* First, it is clear that workers always revolt. As a result, the dictator would always retain capitalists' support whenever possible. For a given number of firms producing onshore, m, the maximal amount of rents the dictator can extract from capitalists while retaining their support is

$$p\pi(m^*|N) + (1-p)[(1-\phi)\pi(m|N) - c_s] = \pi(m^*|N) - c_r,$$
(B.17)

from which I obtain

$$\phi \pi(m|N) = \pi(m|N) - \pi(m^*|N) - c_s + \frac{c_r}{1-p}.$$
(B.18)

Given  $\pi(m|N)$  is increasing in m, the dictator always sets m = 1 and extracts  $\pi(1|N) - \pi(m^*|N) - c_s + \frac{c_r}{1-p}$  from capitalists when  $\pi(1|N) - \pi(m^*|N) - c_s + \frac{c_r}{1-p} > 0$ .

When  $\pi(1|N) - \pi(m^*|N) - c_s + \frac{c_r}{1-p} \leq 0$ , the societal cost is too high for capitalists such that they always revolt even if the dictator do not extract any rents from them.

## C Statistical Results in Section 5

## C.1 The Case of Argentina

The military dictatorship in Argentina from 1973 to 1983 is another case in point. At first, Argentina seems to be a difficult case for the current theory. While Perón, who was democratically elected and whose key constituency was the working class, is often associated with FDI restrictions and cronyism, the military dictatorship is often thought to be the one who opened Argentina to foreign investment and reduced the prevalence of cronyism in the economy.

Recent research, however, show otherwise. In fact, most of the anti-FDI measures were enacted prior to Perón's first presidency, while Perón's government actively sought FDI through a serious of legal refoms (Pinto 2013). The military regime, on the other hand, was actually the one who reversed previous governments' warm attitude towards FDI and imposed more restrictions on foreign investment. After coming into power, the military government soon "created an agency (in 1976) that had the discretionary power to approve which (foreign investment) projects would be admitted and granted preferential treatment" (Pinto 2013, 185). Although the regime repressed labor and was allegedly friendly towards business, they hardly received any foreign investment. What's more, few of the foreign investment projects approved by the regime actually received the government's investment promotion benefits. In fact, a lot of prominant multinationals, including GM, Fiat and Peugeot, left the country altogether due to the regime's discriminatory policies towards foreign investors. In contrast, the succeeding governments of both Alfonsín and Menem actively courted foreign investment, and "the country witnessed what was probably the biggest FDI inflows in history under a Peronist government led by Carlos Menem" (Pinto 2013, 10).

Labor repression and cronyism were also key features of the military regime. Although the claimed goal of the "Dirty War" was to defeat left-wing guerrilla activity, the majority of the victims were actually workers, students and union activists (Chen 1988). What's more, the military regime repressed unions selectively, with unions representing workers of the military's cronies' firms more likely to be targeted (Klor, Saiegh, and Satyanath 2017). The primary motive for labor repression was financial gains, as labor repression could significantly increase market valuations of the firms, benefiting members of the military regime (Klor, Saiegh, and Satyanath 2017). As a result, average salaries were reduced by half in real terms between 1975 and 1978 alone.

The working class responded by staging continuous strikes throughout the late 70s despite heavy-handed repression (Chen 1988). One serious labor conflict that took place at the height of the military's repression campaign was the mobilization of the Light and Power union in February 1977, led by Oscar Smith, against the military's attempt to change the legislation concerning collective bargaining. The strike lasted more than 15 days and seriously disrupted the electricity supply in Buenos Aires. It ended only after the military threatened to use force while also promising to enter into discussion with the union over collective bargaining issues. In 1979, a general strike was called by the leading union leaders, the Commission of 25, on April 27. They listed a series of demands to the military regime, including salary increase and opposition to the labor repressive legislation. In response, the military jailed all the principal leaders of the srike several days before the scheduled date of the strike.

The situation deteriotated further due to the regime's mishandling of the economy, which saw Argentina's sovereign debt skyrocketing. The military's defeat in the Falkland War in June 1982 and the Mexican debt crisis in August 1982 further exacerbated Argentina's economic difficulty,

which ultimately led to the general strike in December. While the moderate's demands focused on economic issues such as wage increase, the more hard-line faction in the labor movement also demanded an immediate transition to democracy. In the end, the Army command was forced to negotiate the terms of elections with the opposition (Haggard, Kaufman, and Teo 2012). Thus, as in the case of both Korea and Indonesia, the working class again played a decisive role in bringing down the military dictatorship in Argentina.

#### C.2 Variables

The main variable of interest, "Government Screening", comes from Pandya (2014), where it measures the percentage of industries requiring informal regulatory requirements for foreign investors to invest, and captures the extent to which the government is able to arbitrarily restrict FDI inflows into domestic industries. I also include several control variables from Pandya's (2014) dataset. The "Urban Population" variable measures the proportion of urban population in a country. This variable corresponds to the level of urbanization in a country, and serves as an indirect measure of the power of the working class. The "Currency Crisis" variable is an indicator variable that equals 1 if there is a currency crisis in a given country-year. The "Banking Crisis" variable is an indicator variable that equals 1 if there is a banking crisis in a given country-year. The "Debt Reschedule" variable is also an indicator variable that captures whether a country goes into default and requires rescheduling its sovereign debt. The "Signed IMF Loan" variable captures whether the country is in an IMF assistance program in a given year. In addition, I also include log GDP per capita, "log(GDP per Capita)", and trade to GDP ratio, "Trade/GDP", as control variables. The data covers the period from 1970 to 2000.

The measure for democracy comes from two sources. The indicator variable, "Democracy", comes from Cheibub, Gandhi, and Vreeland (2010), where it equals 1 if Cheibub, Gandhi and Vreeland (CGV) classifies a country as democracy in a given year. The variable "Polity4" is the Polity Score from the PolityIV database for a country in a given year and ranges from -10 to 10, where 10 indicates the most democratic regime, and -10 indicates the most authoritarian regime.

The measure for corruption, "Control of Executive Corruption", comes from Coppedge, Gerring, Lindberg et al. (2017), where it measures how routinely members of the executive grant favors in exchange for bribes. The measure ranges from -5 to 5, where -5 implies that corruption is endemic and 5 implies that corruption hardly ever happens. This variable thus directly corresponds to the level of rent-seeking,  $\phi$ , in the model. To capture the level of dissatisfaction among the working class towards the government, I use the number of general strikes per country-year from Banks' (2018) dataset, which contains the number of annual strikes for 198 countries from 1919 to 2017.

#### C.3 List of Countries

Table C.1 gives the list of countries included in the data and whether each of them has ever been classified as dictatorship by either the Polity Score or the CGV measure.

Bahrain Yes	Canada No	Cote d'Ivoire Yes	Ethiopia Yes	Haiti Yes	Italy No	Mexico Yes	Oman Yes	Saudi Arabia Yes	Thailand Yes	Uruguay No	
Bahamas No	Cameroon Yes	Costa Rica No	Egypt Yes	Guatemala No	Israel No	Malaysia Yes	Norway No	Qatar Yes	Switherland No	UK No	
Austria No	Brazil Yes	Colombia No	Ecuador Yes	Greece Yes	lran Yes	Madagascar Yes	Nigeria Yes	Portugal Yes	Sweden No	UAE Yes	
Australia	Bolivia	China	Dominican Republic	Germany	Indonesia	Korea	Nicaragua	Philippines	Spain	Turkey	Zimbabwe
No	Yes	Yes	No	No	Yes	Yes	No	Yes	Yes	Yes	Yes
Argentina	Belize	Chile	Denmark	France	India	Kenya	New Zealand	Peru	South Africa	Tunia	Zambia
Yes	No	Yes	No	No	No	Yes	No	Yes	Yes	Yes	Yes
Algeria	Belgium	Cape Verde	Cyprus	Finland	Honduras	Japan	Netherlands	Parkistan	Singapore	Togo	Venezuela
Yes	No	No	Yes	No	No	No	No	Yes	Yes	Yes	No
Name	Name	Name	Name	Name	Name	Name	Name	Name	Name	Name	Name
Dictatorship	Dictatorship	Dictatorship	Dictatorship	Dictatorship	Dictatorship	Dictatorship	Dictatorship	Dictatorship	Dictatorship	Dictatorship	Dictatorship

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#### C.4 Results

Table C.2 – C.5 divide both democratic and non-democratic observations in the data into two groups, "Full FDI Screening" and "Partial FDI Screening", and compare the average number of annual general strikes and the average level of executive corruption between the two groups for democratic observations and non-democratic observations respectively.

More specifically, a country is classified as having "Full FDI Screening" if its "Government Screening" measure equals 1 in a given year, meaning that all industries in the country require informal regulatory requirements for foreign investors to invest. Otherwise the country is classified as having "Partial FDI Screening" in a given year. Table C.2 and C.4 show the comparison using the CGV measure for democracy, while Table C.3 and C.5 show the comparison using the Polity Score for democracy, where a country is classified as non-democracy if it has a Polity Score below 5 in a given year.

In both Table C.2 and Table C.3, the average number of general strikes for non-democratic countries with full FDI screening is around twice as large as the average number of general strikes for their counterparts with partial FDI screening, while the numbers are almost identical for democratic countries with different FDI screening regimes. Similarly, Table C.4 and Table C.5 reveal that countries with full FDI screening also have more widespread corruption than their counterparts with partial screening.

	Non-Democracy	Democracy
Full Screening	0.22 (N = 144)	0.38 (N = 297)
Partial Screening	0.12 (N = 420)	0.35 (N = 540)
p-value (one-way t-test)	0.04	0.29

#### Table C.2: Mean Annual General Strikes using CGV measure for democracy

Note: Number of observations is contained in the parentheses.

Table C.3: Mean Annual General Strikes	using the Polity Score	for democracy
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	Non-Democracy	Democracy	
Full Screening	0.25 (N = 142)	0.38 (N = 293)	
Partial Screening	0.11 (N = 407)	0.36 (N = 541)	
p-value (one-way t-test)	0.01	0.39	

Note: Number of observations is contained in the parentheses.

Table C.6 presents the regression results that allow me to investigate this pattern more rigorously. Column 1 and 2 in Table C.6 present the regression results of the number of general strikes, where Column 1 measures democracy using the CGV dichotomous measure and Column 2 measures democracy using the Polity Score. All regressions include country- and year-fixed effects, with standard errors clustered by country.

	Non-Democracy	Democracy
Full Screening	-1.02 (N = 128)	1.18 (N = 296)
Partial Screening	-0.68 (N = 412)	0.88 (N = 538)
p-value (one-way t-test)	0.0007	0.99

#### Table C.4: Mean Control of Executive Corruption using CGV measure for democracy

Note: Number of observations is contained in the parentheses.

#### Table C.5: Mean Control of Executive Corruption using the Polity Score for democracy

	Non-Democracy	Democracy	
Full Screening	-1.04 (N = 126)	1.18 (N = 293)	
Partial Screening	-0.78 (N = 399)	0.91 (N = 541)	
p-value (one-way t-test)	0.008	0.99	

Note: Number of observations is contained in the parentheses.

In Column 1 and 2, the coefficients for "Government Screening" are positive in both specifications. Thus, a higher level of informal government screening over foreign investment is associated with a greater number of general strikes per country-year. This is quite intuitive, as FDI restrictions suppress workers' wages and alternative ways of getting rid of the government, namely the ballot box, do not exist, workers have no other ways but to turn to violence in order to protect their own rights.

Although statistically insignificant, democracy tends to moderate the positive effects of government screening on the number of general strikes. This indicates that the purposes of informal government screening may be different for democratic and non-democratic regimes. While the purposes of informal government screening over foreign investment in non-democracy are mainly about rent-seeking and protecting governments' cronies at the expense of workers, the aim of government screenings in democracy is to ensure that the rights of workers are protected. As a result, workers in democracy may actually benefit from informal government screening. Interestingly, democracies tend to have more strikes than non-democracies. This may reflect the fact that strikes are legal and allowed in democracy while they tend to induce violent government repressions in non-democracy.

The number of general strikes also positively associates with the proportion of urban population. As urbanization and economic development create a large and powerful working class, it is intuitive that the working class exercise their increasing power to influence governments' policies. And the easiest way for them to do so is through strikes. Thus, as the power of the working class increases, we should clearly expect more general strikes. The regression results thus also conform to the theoretical predictions of Rueschemeyer, Stephens, Stephens et al. (1992).

Note that there are a lot of confounding factors that can influence workers' perceptions over FDI, the most obvious of which is nationalism. Thus, workers may be tempted to resist foreign

takeovers of their industries even though they can obtain material benefits from these investments (Shayo 2009). However, even with these confounding factors, I still find a positive and statistically significant relationship between FDI restrictions and workers' dissatisfactions with the government, lending support to the theoretical predictions of the model.

Column 3 and 4 in Table C.6 present the regression results of the level of executive corruption, where Column 3 measures democracy using the CGV dichotomous measure and Column 4 measures democracy using the Polity Score. All regressions include country- and year-fixed effects, with standard errors clustered by country.

In Column 3 and 4, the only statistically significant terms are the measure for informal government screening, the two measures for democracy, and their interaction terms. Specifically, the coefficients for "Government Screening" are negative in both specifications. Thus, informal government screening is positively associated with the level of corruption in a country. The result, however, is less pronounced in democracy, which is reflected in the positive coefficients for the interaction terms between "Government Screening" and the two measures of democracy. The result thus demonstrates again that the nature of informal government screening is different for democracies and non-democracies. And the more democratic a country is, the less government screening is about rent-seeking and cronyism. Democracy also reduces the level of corruption by itself. This is to be expected, as public monitoring combined with the possibility of losing office will clearly reduce politicians' incentives to accept bribes.

I conclude the analysis by looking at the relationship between wage and "Government Screening", where the annual wage data comes from OECD (2019). Column 5 in Table C.6 summarizes the results, where all regressions include country-fixed effects, with standard errors clustered by country. As Column 5 shows, the coefficient for "Government Screening" is negative and statistically significant. Thus, a higher level of FDI restrictions tends to reduce the average wage level. Democracy again tends to moderate the negative effects of "Government Screening" on the wage level while dictatorship tends to exacerbate it, as reflected in the positive coefficient of the interaction term of "Government Screening" and the Polity Score. Specifically, the result shows that while switching from no FDI screening to full FDI screening for a country with a Polity Score of -10 will reduce the country's annual wage by around 9.6%, it will actually increase the annual wage for a country with a Polity Score of 10 by around 0.4%.

Overall, the statistical results show that as FDI restrictions increase under dictatorship, there indeed tends to be more unrest on the part of the working class and more corruption on the part of the regime, supporting the theoretical results of the model.

		D	ependent variable:		
	General	General Strikes		Control of Executive Corruption	
	(1)	(2)	(3)	(4)	(5)
Government Screening	0.193* (0.102)	0.146**	$-0.292^{*}$	$-0.226^{**}$	$-0.046^{***}$
Screening*Democracy	-0.144 (0.117)	(0.000)	0.276	(0.072)	(0.010)
Screening*Polity4	(0117)	-0.011	(01170)	0.025**	0.005***
Democracy	0.296**	(0.000)	0.600**	(0.011)	(0.002)
Polity4	(0.122)	0.015	(0.207)	0.035**	-0.007
Banking Crisis	0.021	0.023	0.016	0.030	-0.002 (0.012)
Currency Crisis	0.060	0.065	0.022 (0.034)	0.024	0.004
Debt Reschedule	-0.066	-0.055 (0.093)	0.064	0.071	(0.00+)
Signed IMF Loan	0.122	0.116	-0.043	-0.050 (0.043)	-0.0003
log(GDP per Capita)	-0.196	-0.127 (0.148)	0.286	(0.043) 0.441 (0.270)	0.616***
Trade/GDP	0.005*	0.005	0.001	0.001	(0.107) $-0.002^{*}$ (0.001)
Urban Population	(0.003) 1.361 (0.836)	(0.003) 1.524* (0.781)	(0.003) -0.282 (1.459)	-0.133 (1.513)	(0.001) -1.085 (0.894)
Observations R <sup>2</sup>	1,355	1,337	1,347	1,337	228 0 992
Adjusted R <sup>2</sup> Residual Std. Error	0.255 0.630 (df=1249)	0.252 0.635 (df=1235)	0.946 0.387 (df=1243)	0.946 0.391 (df=1235)	0.991 0.028(df=186)

## Table C.6: Corruption, Strike, Wage and FDI Restrictions

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01 Note: All regressions include country- and year-fixed effects, with standard errors clustered by country.

#### C.5 Is Expropriation Equivalent to Taxation?

Can we also think of  $\phi$ , the proportion of profits expropriated by the dictator, as the level of corporate taxation in a country instead of the level of corruption? Indeed, if the dictator can use the government's tax income discretionally, he may impose a higher tax on domestic firms in exchange for protection from foreign competition.

To examine whether a higher level of protection is associated with a higher level of corporate tax, I re-run the regression in Section C.4, with the dependent variable now being the ratio of corporate tax over GDP (Prichard, Cobham, and Goodall 2014). Table C.7 presents the result. As we can see from the table, a higher level of FDI restrictions under dictatorship is not associated with a higher level of corporate tax. In fact, a higher level of restrictions is associated with a slightly lower level of corporate tax under dictatorship, albeit being statistically insignificant.

One possible explanation for this result is that non-democratic countries tend to have a lower level of fiscal capacity (Besley and Persson 2011), which makes tax evasion under dictatorship pervasive. Thus, taxing domestic firms through formal channels may not be an efficient way of rent-seeking for dictators. As a result, dictators are more likely to demand rents from domestic capitalists through informal channels, as the cases of both Korea and Indonesia demonstrate.

	Dependent variable:		
	Corporate	Tax/GDP	
	(1)	(2)	
Government Screening	-0.216	-0.094	
C	(0.404)	(0.320)	
Democracy	-0.233		
-	(0.250)		
Screening*Democracy	0.199		
	(0.427)		
Screening*Polity4		0.008	
		(0.035)	
Polity4		-0.016	
		(0.025)	
Currency Crisis	-0.136	-0.131	
	(0.094)	(0.093)	
Banking Crisis	-0.196	-0.206	
	(0.134)	(0.136)	
Debt Reschedule	-0.023	-0.048	
	(0.109)	(0.122)	
Signed IMF Loan	0.107	0.112	
	(0.073)	(0.075)	
log(GDP per Capita)	2.080**	2.138**	
	(0.961)	(0.990)	
Trade/GDP	0.004	0.004	
	(0.009)	(0.010)	
Urban Population	-5.061	-5.263	
	(3.391)	(3.352)	
Observations	694	684	
$\mathbb{R}^2$	0.775	0.778	
Adjusted R <sup>2</sup>	0.746	0.749	
Residual Std. Error	0.643 (df = 613)	0.643 (df = 605)	

#### Table C.7: Corporate Tax and FDI Restriction

\*p<0.1; \*\*p<0.05; \*\*\*p<0.01Note: All regressions include country- and year-fixed effects, with standard errors clustered by country.

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