Get Out: How Autocratic Regimes Select Who Emigrates

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Most autocracies restrict emigration, yet still allow some citizens to voluntarily exit. How do these regimes decide who can leave? We argue that many autocracies strategically target anti-regime actors for emigration, thereby crafting a more loyal population without the drawbacks of persistent cooptation or repression. However, this generates problematic incentives for citizens to join opposition activity to secure exit. In response, autocracies simultaneously punish dissidents for attempting to emigrate, screening out all but the most determined opponents. To test our theory, we examine an original dataset coded from 20,000 pages of declassified emigration applications from East Germany's state archives. In the first individual-level test of an autocracy's emigration decisions, we find that active opposition promoted emigration approval, but also punishment for applying. Pensioners were also more likely to secure exit and professionals less likely. Our results shed light on global migration's political sources and an overlooked strategy of autocratic resilience.

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In 2011, as part of a crackdown against government critics, China jailed artist Ai Weiwei and confiscated his passport. After his release, Ai placed a bouquet on a bike outside his apartment every morning to protest continued restrictions on his travel. With little warning, the regime reversed course in 2015, returning Ai's passport and allowing him free travel abroad (Whiteman 2015; Phillips 2015). China's treatment of Ai is emblematic of how most autocracies manage emigration, neither respecting complete freedom of exit nor enforcing total closure. Instead, a large majority of modern autocracies employ a *selective emigration policy* that allows some exit but limits the right to specific individuals or groups. This includes many of the most repressive regimes, from Cuba to the Soviet Union and the rest of the Eastern Bloc. How do autocracies strategically manipulate emigration to their benefit? Specifically, how do autocracies decide which citizens are allowed to exit and which are forced to stay?

Scholarship on emigration policy in autocracies has focused on the general openness of exit (Moses 2011; Miller and Peters 2020), whereas this article shifts the focus to *who* regimes allow to emigrate. A central motive for freer exit is that emigration can act as a "safety valve" that allows political opponents to leave, reducing opposition at home (Pfaff 2006; Miller and Peters 2020). However, this comes with a dangerous sacrifice of control if regimes lose the ability to retain citizens vital to the economy and

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security. We outline a widespread approach in which regimes deliberately select opponents for legal emigration while restricting the right of others they want to keep, which we call a *targeted safety valve* strategy. This turns the famous Hirschman (1970, 1978) framework of individuals choosing between exit and voice on its head—autocrats also have agency in targeting their opponents for easy exit. We argue this strategy has several advantages relative to cooptation or repression alone.

However, the targeted safety valve strategy creates incentive problems for the regime. In particular, citizens can become motivated to express opposition to secure exit. We argue that regimes using this strategy to select out opponents will allow exit in combination with significant punishment. This serves as a screening mechanism that ensures only the most motivated opponents leave. Regimes also tailor their strategy to reduce the economic and security costs from the loss of productive citizens.

To test how autocracies decide who exits and who stays, we examine a representative sample of declassified emigration applications from East Germany. To our knowledge, this is the first empirical analysis of an autocracy's individual-level decisions on emigration. Although East Germany is often imagined as closed between the Berlin Wall's construction in 1961 and the mass emigration crisis of late 1989, it authorized an average of 25,000 citizens to emigrate each year from 1962 to 1988 (Pfaff 2006, 66). As we discuss, the regime formulated these individual decisions with great care, making it an ideal case to tease out an underlying logic. In addition, among regimes with application data available, East Germany's unusually extensive data-gathering for its time makes it arguably the best parallel to contemporary autocracies and their uses of digital and surveillance technology.

After outlining our theory and emigration policy in East Germany, we discuss our sample of more than 500 applicant files, many of which include multiple applications over several years. Because of the data's sensitivity, electronic records are unavailable and we had to individually hand-code these files, meaning a complete record of applications is infeasible. Instead, we chose a representative sample of applicants from East Berlin, the most politically salient location for emigration. Analyzing more than 20,000 pages of records, we collected data on applicant characteristics, their reasons for applying, regime decisions and their justifications, regime punishments, and extensive further information.

Our empirical analysis shows that East Germany was significantly more likely to allow emigration if the applicant engaged in active opposition, demonstrating the targeted safety valve strategy. This effect is robust across multiple testing variations, including panel setups, and is larger if the applicant used more threatening forms or numerous types of opposition. Simultaneously, opposition also increased the likelihood of punishment (captured by surveillance and imprisonment) in response to the application, illustrating the screening mechanism that coexists with the safety valve. We also find evidence that East Germany resisted letting economically valuable citizens leave, capturing the trade-offs presented by citizen exit.

A deeper understanding of how autocracies select individuals for exit is important for two reasons. First, it illuminates a hidden logic behind a significant source of global migration. As of 2019, about 125 million of the world's 270 million migrants emigrated from an autocracy,[1] with the vast majority moving through regular channels.[2] Further, there are numerous politically significant cases of autocracies pushing or allowing out citizens they regard as undesirable, from Cuba's Mariel boatlift to the Soviet Union's policy toward Jews and other minorities starting in the 1970s to modern Russia and China (Zaslavsky and Brym 1983; Greenhill 2010; Xiang 2016; Troianovski 2021). This paper examines the

[1]This uses United Nations (2019) for the migrant data and Boix et al. (2013) to define autocracy. When we reference samples of autocracies below, we continue to use Boix et al. (2013).

[2]According to International Organization for Migration (2010, 29), about 10–15% of the world's migrants are undocumented. Approximately another 10% are refugees (International Organization for Migration 2010). Thus, even if all undocumented and refugees left their country without permission, 75% of all migrants left through regular exit.

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decision-making process underlying both the level of emigration and the specific individuals exiting, with substantial economic and political implications for sending and receiving countries (Moses 2011; Peters and Miller 2022).

Second, strategic emigration is an under-examined tool of autocratic resilience. The targeted safety valve strategy reduces opposition without the negative consequences of indefinitely imprisoning or killing opponents. Moreover, it can help to expose hidden opposition since applicants approach the state to apply and reveal their dissatisfaction. In essence, we can understand emigration policy as a state's way of crafting its domestic citizenry to minimize opposition and maximize economic returns.

EMIGRATION POLICY IN AUTOCRACIES

Migration is a significant economic and political force in the modern world, with more than 270 million people currently living abroad. Because of an overwhelming focus on how immigration affects wealthy democracies, researchers have only recently turned to the political sources of emigration and the effects it has on sending countries (Hollifield 2004; Tsourapas 2018). Since democracies generally recognize a right to emigrate, the most interesting and important variation is among autocracies, with a growing body of research trying to explain how dictatorships determine the freedom of exit (Tsourapas 2018; Miller and Peters 2020; Horz and Marbach 2022).

Autocracies have several motives for restricting exit. Free movement can give citizens leverage over their rulers, as they can "vote with their feet" to seek better treatment (Tiebout 1956) and threaten destabilizing levels of mass exit (Hirschman 1993; Pfaff and Kim 2003). This helps to explain why historical regimes that relied on the physical repression of labor, such as feudal Europe, sharply limited peasants' movement (Anderson 2013). In the modern era, with the adoption of passport and visa requirements to enter foreign countries (Torpey 2018), dictators' concerns shifted from mass exit to the costs of legal emigration. One much-discussed threat is "brain drain," in which highly educated or economically valuable citizens leave (Miyagiwa 1991). Modern autocrats also worry about ideological influences from abroad, particularly when citizens move to democracies and return home (Levitt 1998; Tsourapas 2018; Miller and Peters 2020).

Against these threats, autocrats need to balance the potential benefits of emigration. Autocrats often want dissatisfied citizens to leave as a *safety valve* siphoning off regime opponents, non-allied ethnic groups, and the economically frustrated (Sellars 2019; Miller and Peters 2020). Indeed, greater emigration reduces anti-regime protest and civil conflict (Pfaff 2006; Barry et al. 2014; Sellars 2019; Peters and Miller 2022; Lueders 2021). Emigration can also bring several economic benefits, including remittances, increased trade and investment, and skills upgrading among returnees (Hollifield 2004; Gould 1994; Leblang 2010). Some analysts even posit a "brain gain," in which the potential for emigration encourages greater investment in education (Chand and Clemens 2008).

Reflecting these mixed motives, dictators have chosen a range of emigration policies. Figure 1 shows the level of emigration freedom across the world every 20 years from 1960 to 2020. While the conventional wisdom is that autocracies were closed in the past and have now opened, most autocracies' policies are somewhere between wholly restricted (e.g., North Korea and Eritrea) and fully free. Since 2010, about 82% of autocracies are rated by Coppedge et al. (2022) as closer to the middle three (of five) categories on emigration freedom. In these partly restricted regimes, states select *which* individuals and groups can exit. We refer to this as a policy of *selective emigration*.

This selection may be reflected formally in migration law, such as restrictions on specific professions. In other cases, selection is left mainly to bureaucratic decision-making, with guidelines formulated by senior officials. Selection also varies in how fine-grained the targeting is. Formal laws can select out well-defined groups and economic classes, whereas bureaucracies can potentially scrutinize each

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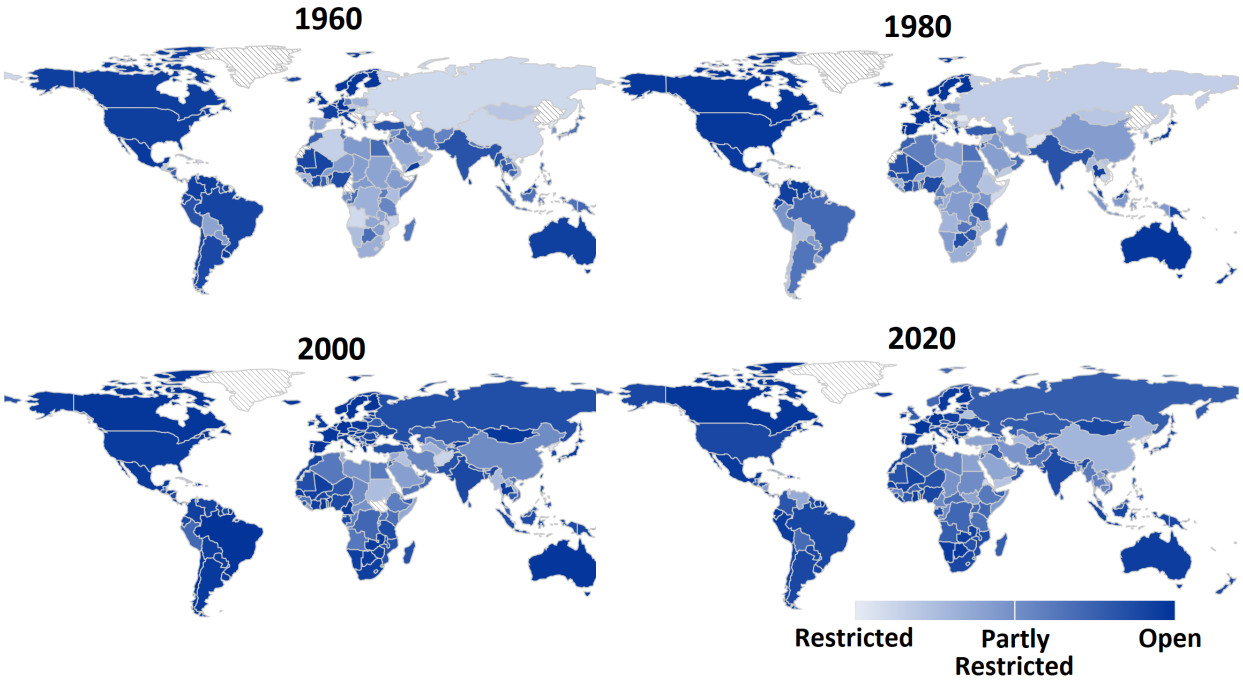
FIGURE 1. Emigration Freedom in the World, 1960–2020



Note: This figure shows the level of emigration freedom around the world in every 20 years from 1960 to 2020 (using the Coppedge et al. 2022 measure of the "freedom of foreign movement").

application to ascertain individuals' motives and intentions.

A common method for implementing selective emigration is requiring citizens to obtain an exit visa, especially for highly educated citizens who generally prefer to move legally. As Figure 2 shows, the proportion of autocracies requiring exit visas from 1973–2008 was remarkably stable, with between 30% and 45% of autocracies using them. However, strategies for controlling emigration go beyond exit visas alone. In 2020, according to our coding of U.S. State Department Human Rights Reports, 67% of autocracies used some combination of exit visas, no-travel lists, or passport controls. Thus, we estimate between two-thirds and four-fifths of current autocracies enforce selective emigration.

Historically, Communist states had some of the strictest restrictions on emigration, but nearly all have experimented with periods of relative openness and selective exit for some populations (Dowty 1989). East Germany allowed 2.7 million citizens to leave for West Germany between its founding in 1949 and the erection of the Berlin Wall in 1961. About 12% of Cuba's population left the country from 1959 to 2004 (Pedraza 2007), most prominently in the 1980 Mariel boatlift that saw 125,000 Cubans flee to the United States (Greenhill 2010; Hawk et al. 2014). Even the Soviet Union initially allowed free exit, with an estimated 1.5–2 million citizens voluntarily emigrating from 1917 to 1922 (Light 2012). Beginning in the 1970s, the Soviets allowed hundreds of thousands of Jews to move abroad, matched by similar policies toward ethnic minorities in Bulgaria, Poland, and Yugoslavia (Zaslavsky and Brym 1983; Dowty 1989). Most recently, China piloted a relaxation of its exit pass system in select cities (Xiang 2016).

The prevalence of selective emigration in autocracies points to a significant gap in the migration literature. Rather than thinking only about general openness, we need to examine how autocracies choose who is allowed to leave as a deliberate strategy to bolster regime survival. Although there are qualitative accounts of the targeting of opponents for exit, there is to date no empirical test of this

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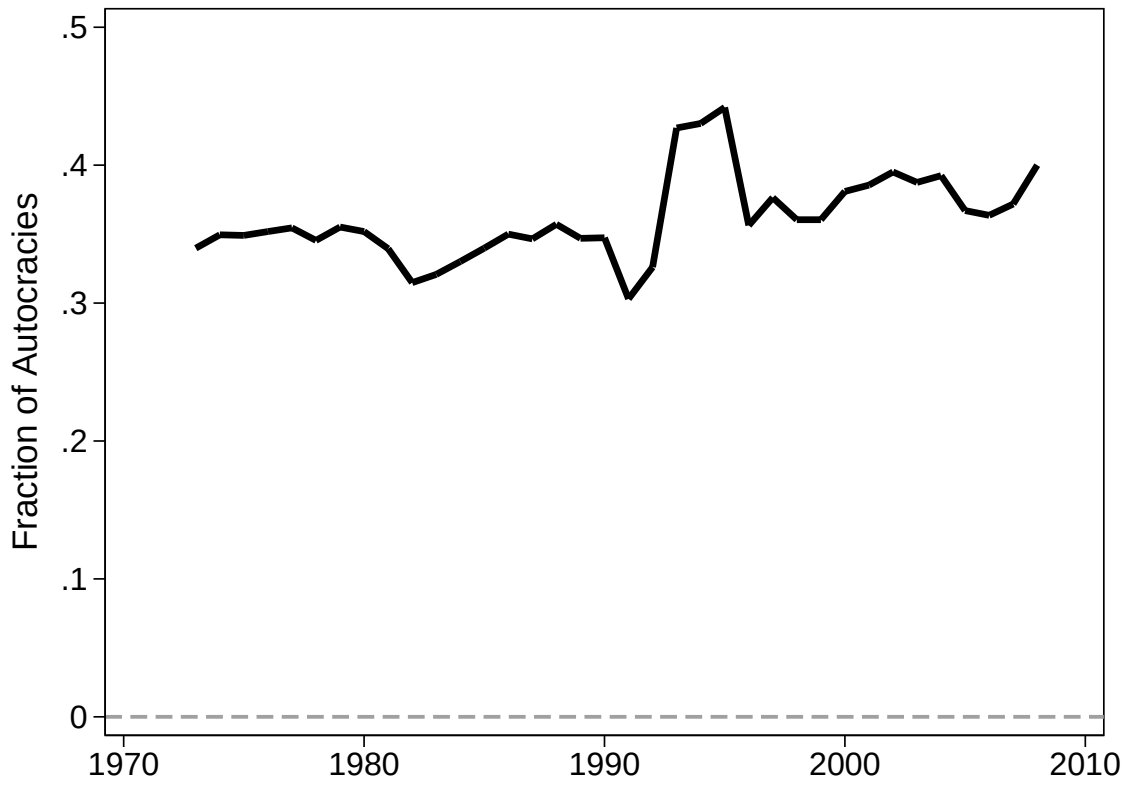
FIGURE 2. Fraction of Autocracies Requiring an Exit Visa



Source: DEMIG (2015)

practice nor an account of how regimes manage the perverse incentives that arise.

THEORY ON SELECTIVE EMIGRATION

How do autocrats select individuals and groups for exit? This section outlines a targeted safety valve strategy that provides an alternative to pure repression or cooptation. We argue that autocracies implement this strategy while balancing the economic and security costs of letting specific individuals leave. To clarify our scope conditions, our theory applies to autocracies lying between total closure and free exit, thereby allowing *some* citizens to exit. We also assume the autocracy has sufficient state capacity to control emigration through laws or bureaucratic scrutiny.[3] Although we test our theory in East Germany, our hypotheses are not limited to it, and we note how the balance of motives might vary across cases.

The Targeted Safety Valve Strategy

We assume that an autocratic leader's main goal is to stay in power, which requires managing threats from rival elites and opposing citizens (Svolik 2012; Schedler 2013). The modern autocracy literature

[3]Regulating emigration is easier today than in the past due to enforcement regimes in destination countries that require individuals to have official documents to migrate legally.

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emphasizes two primary strategies for managing opponents: *cooptation* and *repression* (Wintrobe 1998; Frantz and Kendall-Taylor 2014; Young 2019; Xu 2021). Cooptation forestalls opposition through positive incentives such as political office, material rewards, and policy concessions. Dictators frequently use nominally democratic institutions like elections, legislatures, and parties to coopt opponents, overcome information asymmetries, and reduce intra-elite commitment problems (Gandhi and Lust-Okar 2009; Svolik 2012; Schedler 2013). Alternatively, dictators can use repression to make opposition prohibitively costly or neutralize opponents through imprisonment or killing (Frantz and Kendall-Taylor 2014; Ritter and Conrad 2016; Young 2019). Thus, the dominant framework pictures dictators as deciding between carrots and sticks to manage opponents.

This article challenges this framework. In addition to cooptation and repression, dictators can select out opponents for emigration, which we refer to as a *targeted safety valve* strategy. Research in the "exit vs. voice" framework has long posited that exit reduces the ranks of dissidents exercising voice but typically assumes that exit is feasible for all (Hirschman 1970, 1978; Gehlbach 2006; Sellars 2019). Instead, we endogenize the autocrat's choice to expand or restrict exit opportunities for specific populations. By systematically selecting out active or potential dissidents, regimes can craft a more loyal population and hamper opposition organization and leadership. In contrast, free exit may also disproportionately attract anti-regime citizens but risks losing the economically valuable along with opponents. The ideal is to filter out only the citizens whose presence challenges regime survival.

It may seem surprising that regime opponents want to leave, but winning positive domestic change through "voice" comes with significant personal risk (Pearlman 2017) and faces a major collective action problem. Successful mass mobilization is often infeasible absent major regime failures like stolen elections or violent internal disruption (Miller 2021). Emigration is particularly attractive to members of what we can call the "motivated middle class." In contrast to the acquiescent, state-dependent bureaucratic class (Rosenfeld 2020), these are high-skill individuals who are unhappy with their current situation and willing to act to change it. Although natural supporters of opposition groups and democracy if forced to stay (Inglehart and Welzel 2005), they have the skills and resources to pursue a better life elsewhere. In fact, the greater their demand for democracy, the more motivated they should be to seek it abroad.

The targeted safety valve strategy has significant advantages relative to repression and cooptation in isolation. First, it helps to solve information problems. Identifying dissatisfied citizens in repressive autocracies is a considerable challenge, sometimes called "the dictator's dilemma" (Wintrobe 1998), as individuals have incentives to hide their opposition until they sense regime weakness (Lohmann 1994). By requiring citizens to apply for exit, selective emigration drives unhappy citizens to engage with the state and reveal hidden information. Cooptation strategies can also invite expressions of dissatisfaction to win concessions, but the dictator will be uncertain if they are offering more than needed for loyalty. In contrast, only citizens who genuinely want to leave will complete the emigration process.

Second, opposition emigration is a formal, voluntary process that often comes at a much lower cost than cooptation or repression. Cooptation can entail extensive and indefinite payoffs, major policy concessions, or institutional change with uncertain consequences. Further, dictators face a budget constraint: increasing who profits from the regime decreases the amount available for everyone else (De Mesquita et al. 2003). Repression requires costly investment in coercive capacity, impedes economic development, and is increasingly met with international punishment (Guriev and Treisman 2019). It also intensifies principal-agent problems by strengthening security apparatuses that might betray the dictator (Svolik 2012).

In contrast, selective emigration requires neither payoffs nor a buildup of state capacity outside a (relatively) small, unarmed bureaucracy to process applications. Autocratic leaders can also gain international goodwill or monetary compensation when they allow opponents to leave. The 1974

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Jackson-Vinick amendment in the United States tied trade relations with socialist countries to their liberalization of emigration (Dowty 1989). Indeed, autocratic rulers seem to realize the lower cost of selective emigration: In recent years, the Kremlin, for example, "appears to be betting that forcing high-profile critics out of the country is less of a headache than imprisoning them" (Troianovski 2021).

Third, the targeted safety valve is ideal for sapping opposition strength, as it can select out the most motivated opponents, potential leaders, and critical members of social networks. Seeing their allies escape abroad is often disruptive and demoralizing for opposition activists left behind. Although regime opponents often organize abroad and try to influence domestic politics, this typically presents less of a challenge than if the same actors organized at home (Tsourapas 2018). In addition, many states have effectively controlled diasporas through surveillance and harassment (Adamson 2020; Chaudhary and Moss 2019). In contrast, institutional cooptation gives the opposition political visibility and opportunities to increase domestic support (Gandhi and Lust-Okar 2009; Schedler 2013). In repressive regimes, attempts to "decapitate" opposition groups by killing or jailing leaders risks mobilizing the opposition and inciting backlash across society, including among regime supporters. This is especially likely against non-violent opposition (Chenoweth et al. 2011), as documented in Augusto Pinochet's Chile (Esberg 2021) and under communism in Poland (Hager and Krakowski 2021).

Given these advantages, it is unsurprising to find numerous examples of autocrats targeting political opponents and hostile out-groups for emigration. Among the most politically significant examples is the 1980 Mariel boatlift, which began with the Cuban regime selecting out several thousand current and former political prisoners, in addition to about 10,000 protesters who had occupied the Peruvian embassy (García 2018; Hawk et al. 2014).[4] Despite the seeming chaos, the regime maintained tight control over who was allowed to leave throughout the episode, with a stream of "undesirables" targeted by the government "to alleviate Cuba's domestic, economic, and social pressures" (Hawk et al. 2014, 30). Average citizens could apply to exit only if a family member from the United States picked them up, limiting this outflow to those with close ties to the anti-Castro diaspora (Hawk et al. 2014, 31). Even then, state agents often scrutinized applicants for weeks (García 2018).

The 1970s Soviet policy targeting Jews for emigration aimed "to minimise Jewish nationalist activity and protest without recourse to mass arrests and deportations" (Zaslavsky and Brym 1983, 138). Writing in 1978, Soviet dissident Zhores Medvedev argued that "the state now manipulates emigration opportunities for its own convenience, often just to rid itself of dissidents, the old and the useless" (quoted in Zaslavsky and Brym 1983, 70). More recently, convinced that "not enough dissidents were allowed to leave the country in the Soviet era," Russian leaders have increasingly pushed opposition leaders abroad, where they "are easy to paint as traitors in cahoots with the West" (Troianovski 2021). Qualitative scholars have also described the strategy in Mexico, Morocco, Iran, and elsewhere (Dowty 1989; Greenhill 2010; Sellars 2019). However, rigorous individual-level evidence for this targeting has remained elusive.

A closely related strategy is forced exit, in which regimes coerce opponents into exile instead of relying on voluntary emigration (Greenhill 2010). The practice of deporting dissidents was widespread in Chile and the Soviet Union (Zaslavsky and Brym 1983; Esberg 2021).[5] The Ivory Coast's Félix Houphouët-Boigny was perhaps the most explicit when he declared that anyone voting the wrong way in a 1958 referendum would have 24 hours to leave the country (Kenyon 2018, 474). History has also seen many group-level examples, from the exile of Jews from England and Spain to Idi Amin's 1972 expulsion of Uganda's South Asian minority.

[4]This followed a similar episode in 1965 designed to "rid the island of remaining political dissidents" (Greenhill 2010, 84).

[5]It was rarer in East Germany, especially after the 1976 expulsion of singer-songwriter Wolfgang Biermann backfired and generated a wave of emigration applications from artists and intellectuals (Schumann 1995, 2370).

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We expect forced exit to follow a similar targeting logic as selective emigration. However, like mass imprisonment, it has much higher costs in coercive needs and information. Further, creating flows of forced exiles or refugees can negatively impact a state's international reputation. In extreme cases, it can lead to sanctions under international law, as with the mass exodus of Rohingya from Myanmar. As a result, forced exit is not nearly as common today as legal emigration.

In sum, the targeted safety valve is a highly effective strategy for draining the opposition without many of the drawbacks of pure cooptation or repression. This leads to our first hypothesis:

H1: Individuals who have expressed active opposition to the regime are more likely to be allowed to emigrate.

Screening and Selection

Despite the appeal of filtering out opponents through emigration, public knowledge of this strategy will create perverse incentives for many citizens. First, it lessens the risk of opposition by providing an easy way out if movements are unsuccessful, encouraging wary political dissidents to become active. Indeed, Hirschman (1993) theorizes that whereas the *exercise* of exit atrophies voice, the *opportunity* for exit can increase voice. Second, the strategy encourages noisy opposition among average citizens who want to leave but would otherwise remain quiet. By inducing opposition, the strategy would quickly lose its informational value and drive out many acquiescent citizens the regime would prefer to keep. This dynamic played an important role in East Germany, where "would-be exiters joined dissident protests in the hopes of being classified as seditious by the state, which, they reasoned, would lead to a swifter exit" (Pfaff 2006, 101). Put simply, rewarding opposition gets you more of it.

How do autocracies employing the targeted safety valve strategy escape this dilemma? The key is that regimes cannot make the exit of dissidents too easy. We argue that dictators frequently use a screening technique that punishes opponents when they persist in applying for emigration. Successful applicants may weather years of threats, grueling interrogations, and economic penalties before they can leave. In East Germany, the regime's immediate response was almost always pressure to withdraw the application, combined with promised rewards such as better housing or work assignments (Major 2010, 209). As a first cut, this sifted out the applicants with minor grievances who could be bought off.[6] Anti-regime actors who maintained their applications were then usually met with retaliation—placed under surveillance, discredited within their social networks, fired from their jobs and forced into manual labor, and sometimes imprisoned in response (Mayer 2002; Bauer 2006; Pfaff 2006).

Similarly, the Cuban regime ordered citizens and state agents to carry out "acts of repudiation" against emigrant applicants during the Mariel boatlift (García 2018). Applicants were beaten by mobs, egged, and attacked with police dogs (Hawk et al. 2014, 77). One childhood witness to Mariel recalls his teacher ordering the class to vandalize the homes of intended emigrants after school (García 2018, 17). The Soviet Union targeted Jews who expressed a desire to leave, including firing them from their jobs, expelling their children from university, and imprisoning them (Nezer 1985). Thus, repression, cooptation, and the targeted safety valve often function as complements rather than discrete alternatives.

By imposing immediate and sustained costs on applicants, dictators obtain credible signals of their resolve. Only the most determined and dissatisfied opponents will endure the punishment. Since these are precisely those citizens most likely to continue organizing against the regime if they stay, regardless of attempts at repression or cooptation, the best alternative is to let them leave. In contrast,

[6]We see several examples of this in our data. The reviewer of one file comments, "Family X applied in 1986 for emigration to a non-socialist country for the first time. Immediately after receiving a new place to live was the application withdrawn" (translated by author).

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the moderately dissatisfied will either be deterred from applying or convinced to retreat. In the language of economics, this is an example of screening to solve the adverse selection problem generated by asymmetric information (in this case, opposition intensity). Another benefit of this strategy is that the level of punishment can be calibrated to obtain the total amount of emigration desired by the state without abandoning the selection mechanism.

This screening strategy does not need to apply to citizens the regime wants to leave for economic reasons. For example, pensioners who apply for emigration can be allowed easy exit, whereas working-age adults should face punishment for their application. The state also needs to collect less information on these individuals since there is less to lose from their exit.

In sum, by making exit costly, regimes can credibly reveal opposition intensity and select those they want to emigrate:

H2: Emigration applicants who have expressed active opposition to the regime are more likely to face punishment in response to the application.

Economic Costs and Benefits of Emigration

In addition to managing opposition, autocracies need to weigh emigration's economic and security impacts. Allowing individuals to leave implies they will not directly contribute to the domestic economy for a period but also will not consume state resources. Depending on the individual, this can impose high costs on the regime or provide a net benefit. This balance will also depend on the emigrants' likely activities abroad and their potential to return home. For East Germany, the chance of migrants returning and the domestic economic links to current émigrés were extremely limited after the Berlin Wall's construction. For most other regimes, emigration can bring economic benefits like remittances and increased trade, investment, and aid (Miller and Peters 2020).[7] Thus, while the exact balance will differ by regime, our core argument is that autocracies weigh economic returns in deciding who can emigrate.

A potential economic cost of emigration is the loss of human capital. Although low-skill emigration can reduce manpower in industry and agriculture, making production more expensive, the loss of professional labor is typically seen as more problematic today. Losing highly educated professionals impedes technical advancement and economic growth and can imperil the provision of public goods like defense, health care, and education. Syria, for instance, prevents engineers from exiting until they work for the state for five years (Tsourapas 2018, 214). Similarly, in East Germany, we find state agents denying emigration to medical professionals, noting "the loss of a doctor or nurse due to emigration infringes in major ways on the quality of life of sick citizens, which cannot be justified" (translated by author). In general, states should be more hesitant to allow professionals to leave, especially given the high cost and difficulty of replacing them. On the other hand, regimes can benefit from citizens emigrating if they are regarded as non-productive and consumers of social welfare, such as pensioners and disabled individuals. During the Mariel boatlift, Cuba selected out a "number of criminals, the mentally ill, and the chronically infirm" (Greenhill 2010, 93), intending to pass their social welfare costs to the United States (Hawk et al. 2014, 32).

Finally, in some cases, the state can win immediate economic rewards from emigration. After the Jackson-Vanick amendment's passage, observers noted a correlation between American trade with the Soviet Union and the emigration of Soviet Jews (e.g., New York Times 1981). West Germany sometimes offered ransom payments for East German emigrants, especially political prisoners. However, this

[7]East Germany restricted the receipt of remittances from the West. Instead, relatives sent millions of care packages with scarce consumer goods and clothing.

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affected a relatively small number of cases. Pfaff (2006, 66n.12) estimates that about 5% of successful emigration included ransom paid by West Germany, usually routed through a network of churches. Similarly, we find references to payments in about 2% of our application sample.[8]

This leads to our final set of hypotheses:

H3: Individuals with high economic or security value—such as professionals, the highly educated, and those who work in strategic industries like defense and medicine—will be less likely to be allowed to emigrate.

H4: Individuals who are economically unproductive and dependent on the social welfare system—such as pensioners and disabled persons—are more likely to be allowed to emigrate.

EMIGRATION FROM EAST GERMANY

We test our theory using emigration application decisions made by the German Democratic Republic (GDR, or East Germany) for several reasons. First, the regime approached emigration policy with extreme care and strategic consideration after 1961. In fact, individual exit approvals for regime opponents after 1983 needed to be signed off by the national head of the Stasi (state security), providing unique insight into inner-circle decision-making. Second, East Germany's practice of selective emigration and the depth of its data-gathering parallel many modern autocracies, including China, Russia, and Morocco. Its high state capacity and pervasive network of informers gave East Germany unusually extensive knowledge of its subjects (Müller-Enbergs 2008). Moreover, unlike the modern cases, we have access to declassified individual documents that are likely the most detailed available from any autocracy. Third, East Germany is arguably the most influential case on emigration's political impact, making an analysis of the regime's exit decisions all the more vital.

Before turning to our quantitative data, we overview emigration policy in East Germany, both from the regime's strategic perspective and how it ultimately intersected with the anti-regime movement of 1989. To better understand our sample, we also discuss the application process.

Emigration Policy As Regime Strategy

The GDR was a socialist dictatorship from 1949 to 1990, under the rule of the Socialist Unity Party (SED). Throughout its history, the GDR repeatedly adjusted its emigration policy to maximize regime stability and personal control. To visually capture the swings in emigration allowed by East Germany, Figure 3 shows the number of East Germans leaving each year for West Germany from 1949 through the first nine months of 1989, alongside the Coppedge et al. (2022) rating of the freedom of foreign movement.

After its establishment in 1949, the GDR allowed free exit to purge itself of "fascist remnants" (Pfaff 2006, 65). It soon faced a severe emigration crisis, with 2.7 million East Germans (about 15% of its 1949 population) leaving over the next dozen years, concentrated among the young and well-educated (Pfaff 2006, 64-65). Technocrats warned that the exodus "imperiled the state's industrial development plan" (Pfaff 2006, 64). With rising threats to East Germany's economic future and ideological appeal, the GDR's leader Walter Ulbricht convinced the Soviets to support the construction of the Berlin Wall in 1961, along with a sharp restriction on emigration freedom (Mayer 2002; Major 2010).

From 1961 until its effective collapse in 1989, East Germany implemented a selective emigration policy that allowed roughly 25,000 citizens to emigrate annually (Pfaff 2006, 66).[9] Although many

[8]None of our results significantly change if we remove these cases.

[9]Temporary travel was also highly restricted (Hertle 1996, 77f.).

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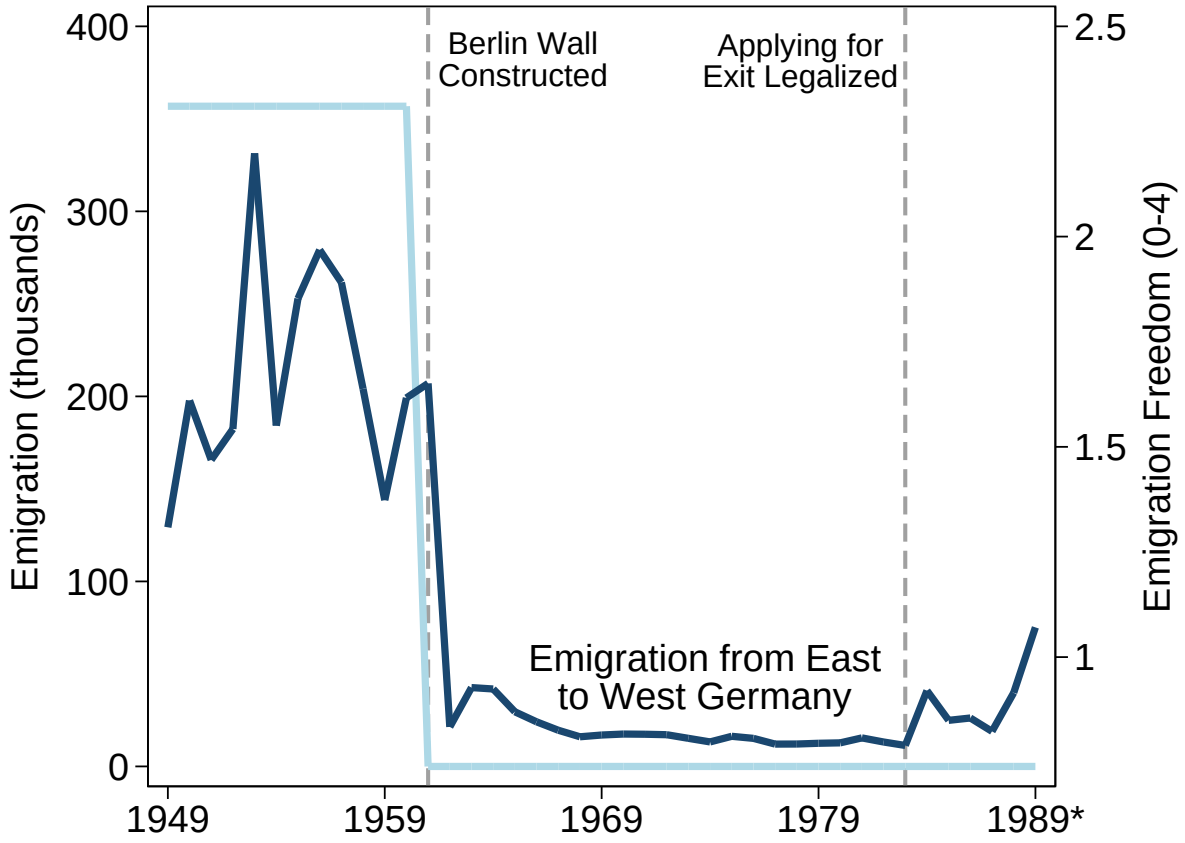
FIGURE 3. Emigration from East Germany



Note: The figure shows the annual number of East Germans leaving for West Germany (the overwhelming majority of emigrants) from 1949 through the first nine months of 1989 (in thousands, from Stasi records referenced in Mayer 2002). For 1989, we use the figure given by MfS-ZAIG (1989) for the first nine months since the regime lost control of exit shortly after. We also show East Germany's freedom of foreign movement (from Coppedge et al. 2022).

East Germans attempted to exit without state approval, either through border crossings or overstaying travel visas, *authorized* emigration dwarfed illegal exits by more than five to one (MfS-ZAIG 1989). Beginning in 1971, the regime outlined several reasons to potentially allow exit, although these were initially kept secret from the public (Lochen 1998, 23-27).[10] The policy allowed for the exit of pensioners and the disabled, as well as citizens seeking family reunification in West Germany or marriage abroad (Lochen and Meyer-Seitz 1992, 46f.).

Starting in 1976, the regime fully embraced the targeted safety valve strategy, with the interior minister declaring, "In order to minimize the political damage to the GDR, persons with a hostile, negative attitude as well as criminal and asocial elements that persistently pursue emigration. . . should

[10]Citizens meeting specific "exclusion criteria" were barred from exit, including "secret bearers," police officers, members of internal security, men who had not fulfilled their military service, and debtors (Lochen and Meyer-Seitz 1992, 326f.).

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be allowed to emigrate" (quoted in Pfaff 2006, 66). In 1977, a now-declassified directive (Order 6/77) explicitly allowed emigration for citizens displaying anti-regime sentiment to prevent an "immediate and concrete danger to national security" or disruption to the GDR's social order. The directive outlined a range of considerations when approving these "exceptional cases," including:

> "(1) the personality of the respective citizen and the information obtained regarding the validity of the motives and reasoning, (2) the type of relations to the individual to whom emigration is supposed to occur, (3) the results of the political-operative measures targeted at disciplining the individual, (4) the extent and character of the applicant's ties back [to the GDR] and their consequences that would emerge through the emigration, (5) the expected reaction to approving emigration by the population or other citizens willing to emigrate" (Order 6/77, translated from Lochen and Meyer-Seitz 1992, 36).

We see clear evidence for our screening mechanism here, as agents are asked to weigh whether the anti-regime motives are genuine and whether attempts to punish have shown any success. In addition, the regime revealed concern over whether the exit would feed back into East Germany through personal contacts or emulation.

Although the state created a targeted emigration system in 1976, applying for emigration was technically illegal until 1983 and often harshly punished by the regime (Lochen and Meyer-Seitz 1992). All applicants were supposed to be put under surveillance, although in practice this was limited to the higher-priority targets (Mayer 2002, 219). Of the 110,000 East Germans imprisoned for political crimes between 1960 and 1989, an estimated 40–75% were charged in part with trying to emigrate (Mayer 2002, 179; Gieseke 2014, 137).[11]

In 1984, the regime experimented with softening emigration control, having made the rules on family reunification public the prior year. The main target was political opponents, with tens of thousands of "enemies, criminal elements and incorrigibles" released in the largest exit in two decades (Major 2010, 215). This softening had the expected effect of weakening the opposition. As Neubert (1997, 340) writes, "the mass exodus of 1984 hit opposition groups hard. . . such groups were continuously thinned out and therefore at times made temporarily unable to act. This was intended by the security apparatus" (translated by the author). However, it also had the unintended consequence of quadrupling the number of emigration applications, forcing the regime to dial policy back and launch a media campaign against emigration (Major 2010, 215).

In 1988–89, emigration intersected with the rising protest movement in complex ways. Increasing emigrant numbers revealed large-scale dissatisfaction in the population, while demand for exit became a familiar rallying cry among those left behind (Pfaff 2006, 100). Emigration created bitter divisions within the opposition, as many regarded mass exit as sapping the opposition's strength and unity. Within dissident groups, "the turnover created as people left the country meant there was little familiarity or communication within the group anymore" (Mohr 2018, 279). A moderate reform group's appeal in a newspaper declared, "Those who leave diminish our hope. We beg you, stay in your homeland, stay with us" (quoted in Sebestyen 2009, 351). This weakening effect is in line with the targeted safety valve strategy and was embraced by East Germany's leadership, with party leader Erich Honecker asserting, "I will not shed a single tear for those who want to leave the country" (quoted in Sebestyen 2009, 327). Indeed, evidence suggests that higher local emigration rates in the 1980s reduced the magnitude of protest in 1989 (Pfaff 2006; Lueders 2021).

By the end of 1989, overwhelming internal opposition and a mass outflow of East Germans through socialist neighbors to the West spelled the end of the regime. Tellingly, the regime stuck to its safety

[11] About one in six eventual emigrants to West Germany had served time in prison, albeit not all related to attempts to leave (Schumann 1995, 333).

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valve strategy to the bitter end. On November 9, 1989, party leaders formulated a delaying tactic that liberalized emigration but still required a lengthy process of applying for passports and acquiring Western currency (Pfaff 2006, 233). That night, large crowds approached the Berlin Wall, incorrectly believing that exit had been made free. A commander of one border crossing was told by superiors to "seek out the 'more aggressive' people at the checkpoint, note down their names and let them through with a special stamp" to ensure they could not return (Sebestyen 2009, 354). Of course, this last-gasp tactic failed, ending the regime and 28 years of selective emigration.

Application Process

Regime leaders crafted detailed instructions on how bureaucrats were to process applications. These rules—published in full after the breakdown of the GDR (Lochen and Meyer-Seitz 1992)—explained which bureaucracies were responsible for processing applications, the information they had to compile, and the criteria to determine whether to forward the application to higher-level agencies.

The first contact between applicants and the bureaucracy were the local councils (*Raete der Staedte und Kreise*), the executive bodies of the GDR's third administrative tier. After the councils received a written application, applicants had to justify themselves in person. If the council's division for "local matters" saw some likelihood of approval, the application was sent to the local Stasi unit for review. From there, it was sent to each of the following agencies and offices at the next administrative level up, all of which had to approve in turn: (1) the District Coordination Group (BKG), (2) the Central Coordination Group (ZKG), and (3) the national-level deputy heads of the Stasi, who had the final authority on the matter (Lochen and Meyer-Seitz 1992, 36). Successful applications after 1983 also needed to be approved individually by Stasi head Erich Mielke, the GDR's second most powerful person, illustrating the importance of emigration decisions to the regime.[12]

In addition to punishing applicants through job loss and sometimes imprisonment, these bureaucracies often stalled the application process by requiring "numerous, repetitive office visits, followed by unclear answers" (Mayer 2002, 114) and demanding endless documentation and permissions from other bureaucratic offices (Marxen and Werle 1999, 8).[13] In many cases, applicants were tacitly denied by simply leaving the application open. When official decisions were made, they were generally communicated orally without giving reasons. Rejections were timed to not be near major social events in case applicants reacted badly to the news. For successful applicants, local civilian bureaucracies helped to facilitate their exit.

SAMPLE OF EAST GERMAN EMIGRATION APPLICATIONS

East German Archives

The East German regime is infamous for its copious records on its citizens. By the late 1980s, the Stasi's files comprised 125 miles of shelf space, each mile with 17 million sheets of paper (Sebestyen 2009, 121). Although not quite as large an operation as the Stasi, local civilian authorities preserved extensive paper records of emigration applications and their outcomes. We examine records from the civilian archives since they received the initial applications and performed the first filtering, allowing us to include the applications never sent to the national level. In addition, Stasi records were compromised by post-1989 document destruction to a much greater extent than civilian archives (Engelmann 1995),

[12]For pensioners and family reunification applicants, final decisions could be made at the sub-national level.

[13]In our application sample, among those identified as regime opponents, the average wait from first application to success was 2.7 years.

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making it more challenging to create a representative sample.

We drew our sample from a de-identified list of all application files in the Berlin local civilian archive. This archive encompasses any East Berlin resident who applied for emigration to a non-socialist foreign country under the GDR.[14] To collect data, we had German-speaking research assistants visit the archives, examine each sampled file, and hand-code a set of variables. Given the lack of complete electronic records and the length of time needed for each file, we limited our sample to a single local archive to maximize comparability across the sample. Berlin was the ideal choice as the most significant urban center in East Germany and the source of the most politically sensitive emigration. Although this means we cannot compare decisions about rural versus urban populations, for example, we get a picture of regime strategy when the stakes were highest.

The German government has stringent privacy laws concerning East German records. Because the GDR collected highly sensitive data on individuals, only the files of those over 100 years old or who have been dead for more than ten years are public. However, we gained special permission to examine files without this restriction. To ensure confidentiality, our data collection was limited in two ways. First, much of the data was binned, such as recording an applicant's age range or broad work sector. Second, we could not make copies or take any pictures of the documents, limiting our data collection to what was feasible for RAs physically present at the archive.

Sampling Procedure

To produce our sample, we obtained a de-identified list of applications made in East Berlin, open at some point from 1980–89, and that have been processed by Berlin's local civilian archive.[15] We limited the search to 1980–89 as data collected by the state had been standardized by then, and this was a period of heightened importance for emigration. The list contains 27,856 files, although not all proved to be applications. Each application file includes the applicant's entire history, often spanning multiple attempts and several years.

We drew a random sample of 600 files from this list, of which 540 were application files. We chose our random sample to be representative of the number of open applications each year and the decisions made each year across the universe of available applications.[16] For instance, 1984 represents 12% of open applications in the period, and thus we chose files so that 12% were open in 1984. In the full set of applications open in 1984, 62% were rejected, withdrawn, or remained open, and 38% were approved. We drew our 1984 sub-sample to also reflect this balance.[17]

An Overview of the Data

Our sampling procedure produced a random representative sample of 540 emigration application files, with just under half including multiple applications. Although all were open at some point in 1980–89, some individuals first applied for emigration as far back as 1972. In the empirical tests, we begin by

[14]The archives have not processed the files for one district, Prenzlauer Berg, and for the district of Köpenik, we only have data for 1989.

[15]This research was approved by the IRB at XX university (redacted). We pre-registered our design with EGAP, now OSF (see appendix for an anonymized record). The Pre-Analysis Plan (PAP) was registered under the legacy system, so we cannot provide an anonymized link. We will provide the link upon publication.

[16]The file names indicated, with reasonable accuracy, the years and outcomes needed for our procedure. We used Stata's random sample command (without replacement). We followed our sampling procedure twice. We first chose 500 files, but after finding that not all were exit applications, we sampled another 100 using the same procedure.

[17]See Table A1 in the online appendix.

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TABLE 1. Summary Statistics

Variable	Mean	Std. Dev.	Min.	Max.	N
1st Applications					
Emigration Approval	0.292	0.455	0	1	537
Surveil/Imprison (Binary)	0.587	0.493	0	1	504
Opposition (Binary)	0.193	0.395	0	1	540
Opposition (Level)	0.244	0.538	0	2	540
Opposition (Number)	0.250	0.573	0	3	540
Year of Application	1984.282	3.379	1972	1989	539
Female	0.410	0.492	0	1	536
Age	33.847	12.585	17	67.5	531
Reason: Economic	0.296	0.457	0	1	540
Reason: Family	0.591	0.492	0	1	540
Reason: Ideology	0.230	0.421	0	1	540
Reason: Freedom	0.226	0.419	0	1	540
All Applications					
Emigration Approval	0.348	0.476	0	1	1,018
Application Number	1.907	1.376	1	12	1,021

Notes: The table shows summary statistics from our sample of first applications and all applications for emigration from East Germany.

testing the outcomes of individuals' *first applications*, a comparable sample of distinct individuals unaffected by prior regime reactions. We also take advantage of the rich temporal data to construct two panel versions of our sample: one testing *each application* (1,021 total applications) and one testing each *applicant-year* with an open application (1,651 total observations). Summary statistics are shown in Table 1.

Figure 4 summarizes the timelines of the application files in our sample. For each individual (ordered horizontally), the figure shows the range of years (ordered vertically) from the first application to the file's closure (stopping at 1989). Individuals approved for emigration before November 1989 are shown in a darker color. We see a mix of outcomes here, including approvals (especially for those who first applied in 1981–84), individuals who gave up, and applications still open at the regime's collapse.

Emigration Approval Our primary interest is predicting which applications the East German regime approved for emigration. To code this, we consider anything but formal approval to be rejection, including when individuals withdrew the application (often under pressure). Applications still open at the regime's effective end in November 1989 are coded as rejected to reflect East Germany's frequent practice of indefinitely keeping applications open rather than formally denying them. *Emigration Approval* is 1 for 29.2% of first applications and 34.8% of all applications.[18] Among first applications, 33.6% were formally rejected, and the rest were withdrawn or not decided.

[18]Just over half of applicants (53.6%) were eventually approved for emigration.

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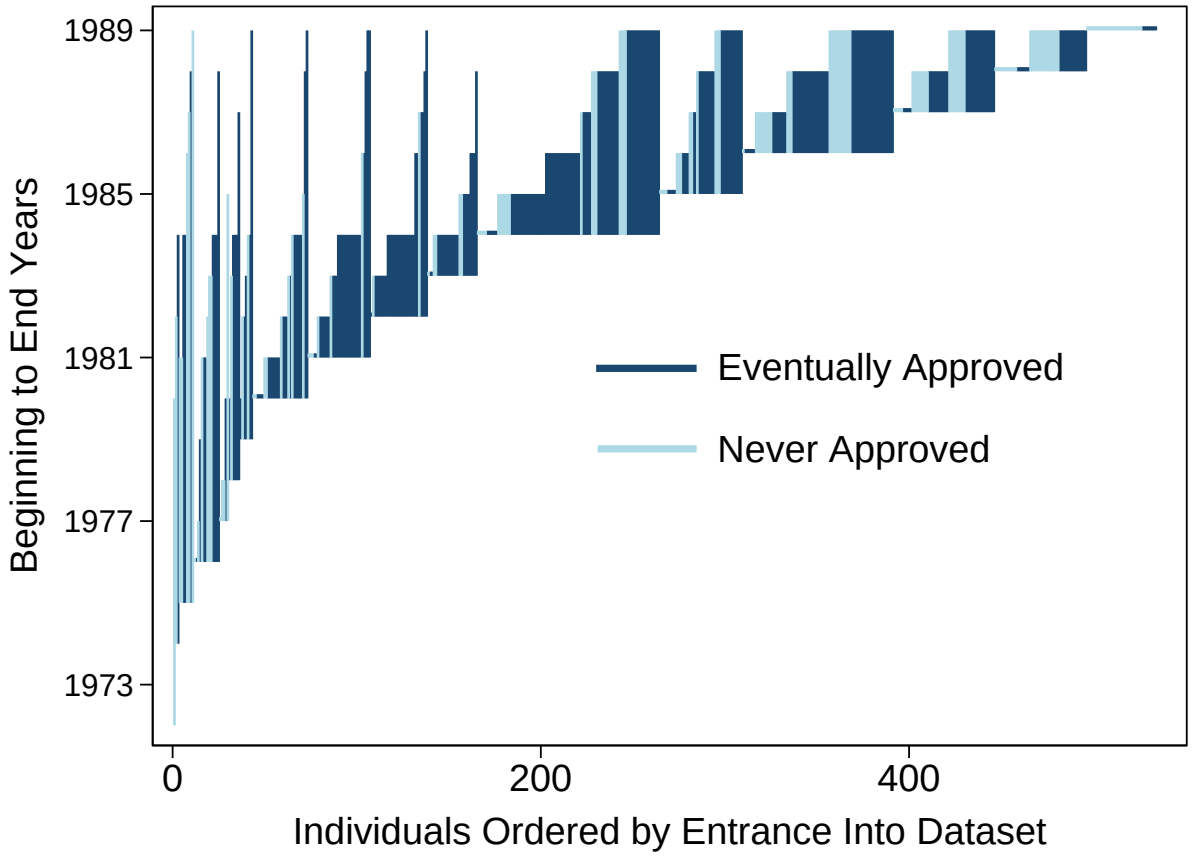
FIGURE 4. Lifespan of Emigration Application Files



Note: The figure summarizes the timeline of each emigration application file in our sample. Individuals are ordered horizontally and the years from first application to the file's closure (stopping at 1989) are shown vertically. Applicants approved prior to November 1989 are shown in the darker color.

Figure 5 provides added detail on approval rates over time. The darker line shows the approval rates for first applications by year of application, with the bars displaying the distribution over time of first applications. The lighter line shows the annual success rate of all applications open in the given year, not just first applications. The temporal patterns fit our expectations from the qualitative analysis. Approval rates were low before 1980, then gradually rose and spiked in 1984. This invited a torrent of new applications in 1984, leading the regime to dial back its approval rates. Finally, facing increasing domestic pressure, the government returned to high rates of approval from 1988–89, but primarily for older applications.

Punishment Figure 6 shows the variation over time of punishment in response to emigration applications, our other dependent variable of interest. We focus on two indicators of punishment: imprisonment and the initiation of surveillance. Only responses recorded as being in reaction to the application are counted. Imprisonment was most common early in this period when emigration

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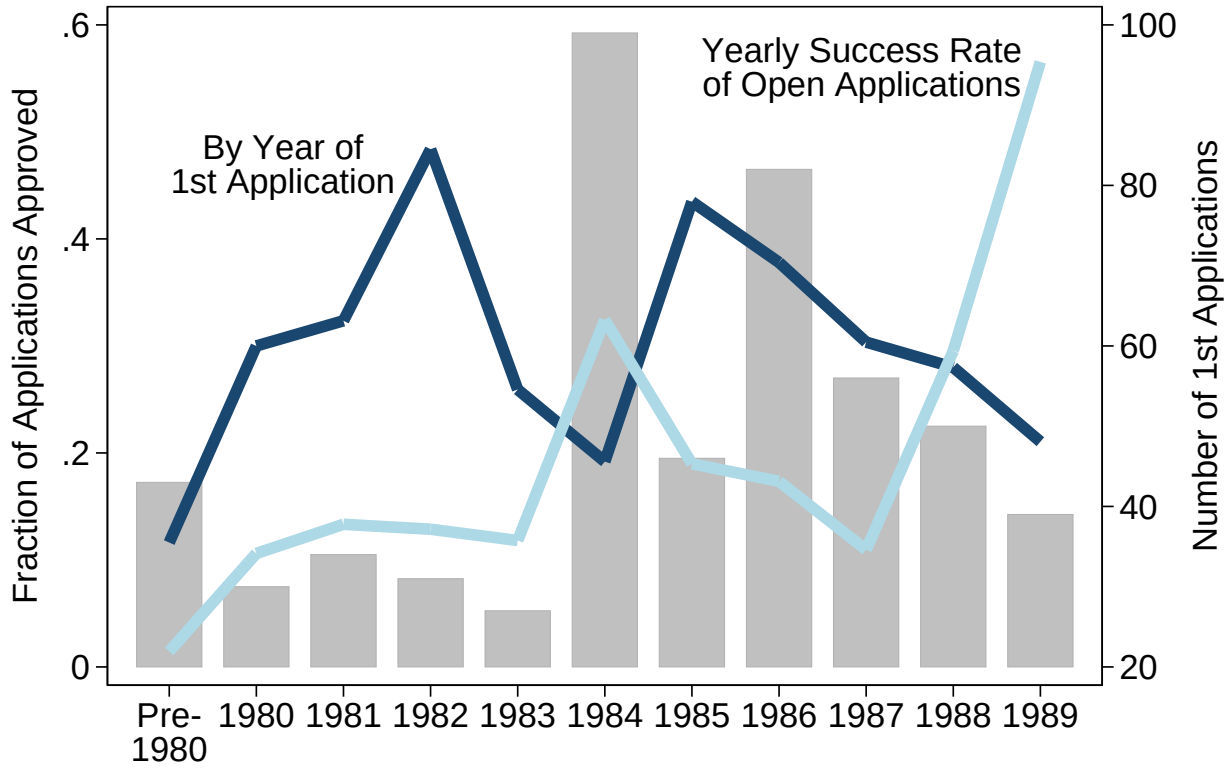
FIGURE 5. Applications and Approval Rates by Year

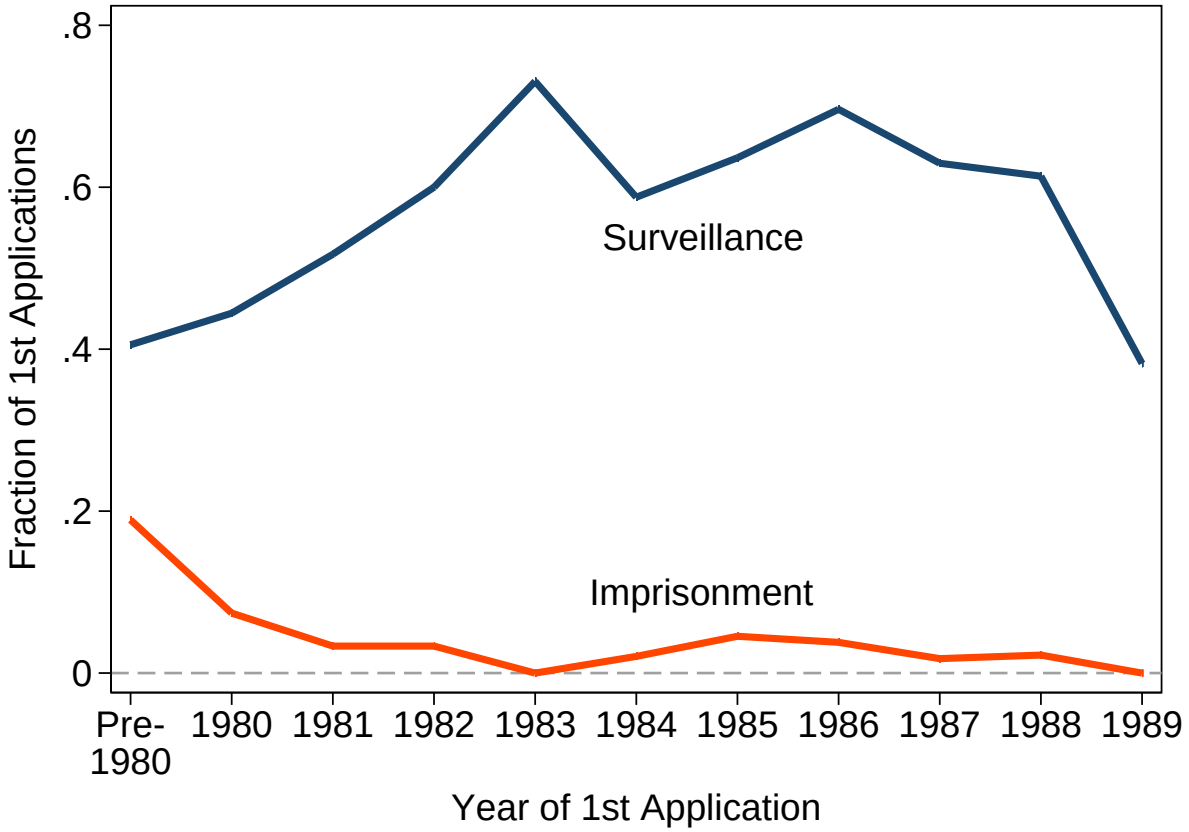


Note: The figure shows East Germany's emigration approval rates over time in our sample. One line indicates approval rates for first applications by year of first application. The other line indicates the annual likelihood of approval among all open applications in a given year. The bars display the distribution of first applications by year.

applications were formally illegal but became relatively rare by the early 1980s. Surveillance was far more likely throughout our sample period. By itself, surveillance can be considered punishment since it frequently included lengthy interrogations and intrusive interference in jobs and social relationships. However, surveillance is best considered a proxy for the state scrutiny that accompanied political, economic, and social punishment. Among first applicants, in all but one case, imprisoned applicants were first placed under surveillance. In total, 58.7% of first applicants were imprisoned or surveilled.

Opposition Our primary explanatory variable of interest is whether applicants expressed active *Opposition* to the regime. We use the regime's record of this, which is appropriate since we are testing the regime's reaction. We only count *active* opposition in our coding since this is more threatening and less likely to be overlooked by the regime. However, we separately examine private expressions of opposition revealed during the application process. Active forms of opposition include membership in anti-regime groups; protest; contacting a Western politician, media source, or embassy; quitting a job or ending SED membership for political reasons; and contacting GDR officials to express opposition.

FIGURE 6. GDR Punishments for Emigration Applications



Note: The figure shows East Germany's punishments in reaction to emigration applications by first application year. Surveillance proxies for the regime's scrutiny that accompanied sanctions like firings, social exclusion, and interrogations. A number of East Germans were also imprisoned for their applications, especially prior to the the formal legalization of the application process in 1983.

We test three versions of this coding. The first is a simple binary coding of any active opposition. The second is a three-valued coding that distinguishes low- and high-threat forms of active opposition. High-threat opposition includes opposition membership, protest, and contact with Western organizations since these activities are the most public and conducive to collective organization. The third is the number of different forms of active opposition recorded for the applicant. Figure 7 shows the fraction of open applicants each year recorded as engaging in any opposition activities and high-threat opposition activities. Roughly 10–30% of applicants each year expressed active opposition.

Other Variables The application sample contains a rich array of data beyond these main variables, some of which are summarized in Table 1. Among applicants, 41% were women, and the average age was about 34.[19] We also test a binary variable, *Elderly*, coded 1 for those over 60 (about 7% of first

[19]For age, the recorded data is binned for privacy reasons, so we construct an *Age* variable that assigns to each individual the midpoint of their age range.

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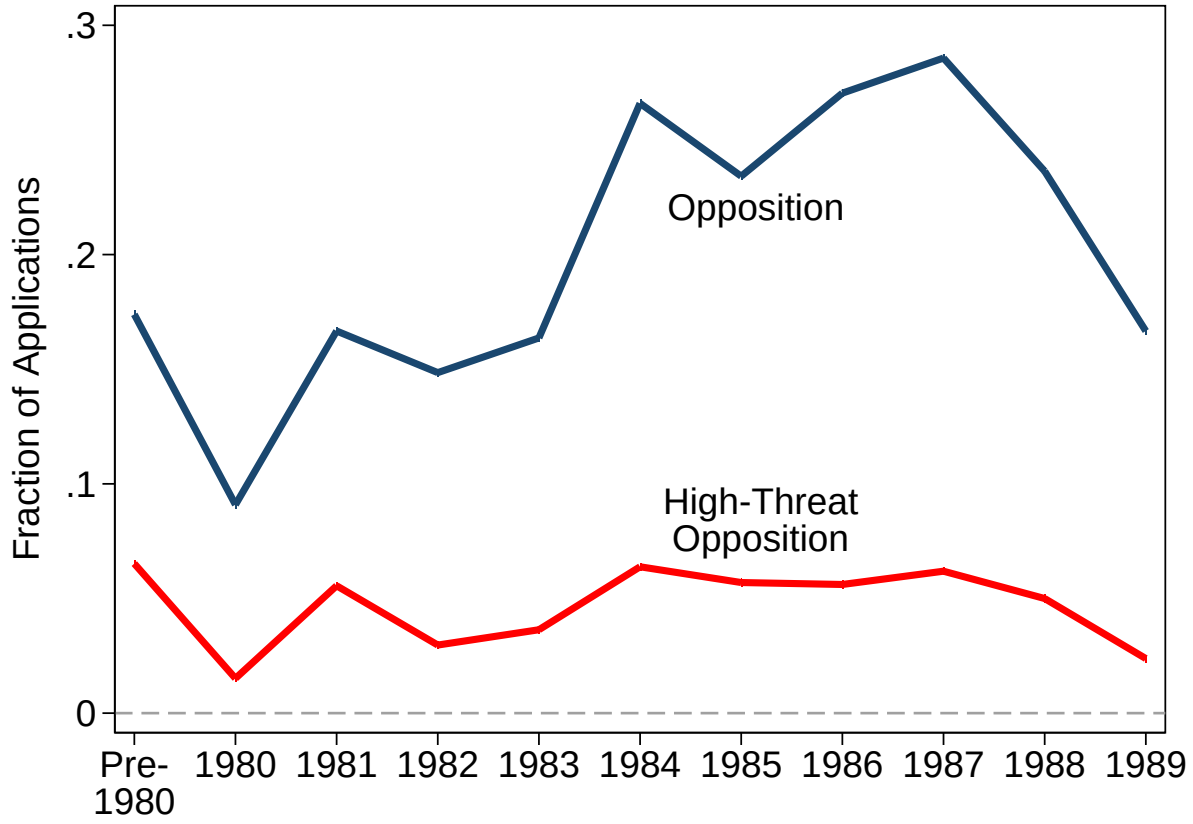
FIGURE 7. Opposition Activity by Emigration Applicants



Note: The figure shows the fraction of all open applications in which the regime recorded the applicant expressing active opposition and high-threat opposition.

applicants), to evaluate whether those at or near retirement age are allowed to exit.

To capture each applicant's economic importance, we have occupational class, education, and industrial background measures. *Occupational Class* takes four values: 0 = Unemployed, 1 = Manual labor, 2 = Semi-skilled/skilled labor, and 3 = Professional. We test this as an indicator of economic value and difficulty of replacement. About 74% of applicants fall into the middle two categories, with just over 5% rated as professionals. *Education* ranges from 0 to 5, indicating less than secondary school (11.9%) up to a university degree (13.1%).

We also recorded applicants' reasons for wanting to emigrate (with multiple justifications allowed). Family was the most common reason, appearing in 59.1% of first applications. This includes family reunification, cross-border marriages, and a desire to care for sick relatives. Just under a third of applicants cited economic grievances, most commonly dissatisfaction with work or housing. About 23% indicated ideological opposition to socialism, while roughly the same number complained about the lack of freedom. The most frequently referenced restriction on freedom was the inability to travel, with smaller numbers citing repression of sexuality and forced military service.

Also of interest is the *bureaucracy's* analysis of the applicant's reasons for applying, which does

not always match the stated reasons. For instance, among applicants citing ideological opposition, the bureaucracy disputed that this was genuine about a quarter of the time. Conversely, for about 12% of applicants *not* citing ideological opposition, the bureaucrat nevertheless recorded it as a reason. In total, for just under a third of first applications, the bureaucracy disagreed regarding one of the four categories mentioned (family, economic, ideology, freedom).

EMPIRICAL RESULTS

Emigration Approval

We begin our empirical testing of emigration approval with the sample of first applications. This ensures there is one observation per individual and without a previous regime reaction to an application, minimizing sample selection issues. Table 2 presents a summary of the results. In the first three models, we use a logit to predict *Emigration Approval* from measures of opposition, controlling for the year of application, gender, *Age*, *Elderly*, *Occupational Class*, and the number of application pages. The pages variable, which ranges from 1 to 400, captures regime attention on the applicant and accounts for the possibility that greater scrutiny reveals opposition activity. The three models vary by the measure of opposition. Models 4–6 repeat this pattern with additional controls for whether the applicant justified their application for economic, family, ideological, or freedom reasons (with multiple allowed).

As predicted by Hypothesis 1, opposition is positive and significant for emigration approval in every model (using robust standard errors). For each opposition measure, Figure 8 shows the large magnitude of effect from a one-unit change in opposition on the likelihood of emigration approval.[20] For the binary measure, opposition increases the chance of approval by 11.9% on average. In relative terms, this is about a 50% increase in likelihood. Similar effect magnitudes are seen for *Opposition (Threat)* and *Opposition (Number)*, but these measures have larger ranges. Moving from 0 to 2 on *Opposition (Threat)* increases the chance of approval by 20.0%, or about 77% in relative terms.[21]

Findings for the economic variables in Table 2 also confirm our expectations. A higher *Occupational Class* makes emigration approval less likely, as predicted by Hypothesis 3. The effect is substantial—shifting from unemployed to professional cuts an applicant's chances of approval by more than half. In contrast, the elderly are more likely to be allowed exit, as predicted by Hypothesis 4. According to Model 1, non-elderly have about a 1-in-4 chance of approval, while the elderly have just above a 60% chance. In tandem, these two findings show a clear picture of the regime maintaining its grip on the most economically productive citizens and ushering retirees out.

Regarding other variables, women are slightly more likely to be approved, although this is not robust.[22] Age does not matter outside of elderly status. The year of application is not predictive. Perhaps surprisingly, the applicant's stated reasons for emigration are not clearly related to approval, including a desire for family reunification. As expected, private ideological opposition is not predictive after controlling for active opposition since quiet dissatisfaction presents little threat. Economic justifications are slightly negative for approval, which aligns with our theory as these are precisely the individuals who can be bribed to withdraw their applications.[23]

We tested similar models in two panel versions of our sample, with results summarized in Table 3. For Models 1–3, the panel includes a separate observation for every year the individual has an open

[20]This was calculated using Stata's `margins` command, which calculates the average marginal effect size across the sample.

[21]Our findings are similar if we test separate binary variables for low-threat and high-threat opposition.

[22]One potential reason for this is the requirement of military service before emigration that exclusively applied to men.

[23]If we instead test the bureaucracy's judgments about each applicant's reason for applying, none of the categories are significantly predictive (see online appendix).

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TABLE 2. Models Predicting GDR Emigration Approval

DV = *Emigration Approval*	(1)	(2)	(3)	(4)	(5)	(6)
Opposition (Binary)	0.685*			0.783**		
	(2.56)			(2.82)		
Opposition (Level)		0.512**			0.591**	
		(2.63)			(2.96)	
Opposition (Number)			0.461**			0.558**
			(2.61)			(3.08)
Year of Application	0.037	0.038	0.034	0.039	0.040	0.036
	(1.18)	(1.20)	(1.09)	(1.22)	(1.24)	(1.12)
Female	0.593**	0.611**	0.586**	0.399	0.416	0.380
	(2.71)	(2.79)	(2.69)	(1.78)	(1.85)	(1.70)
Age	0.009	0.012	0.011	0.004	0.007	0.005
	(0.78)	(0.98)	(0.89)	(0.35)	(0.56)	(0.44)
Elderly	1.642*	1.554*	1.591*	1.648*	1.552*	1.595*
	(2.53)	(2.43)	(2.48)	(2.52)	(2.40)	(2.46)
Occupational Class	−0.414**	−0.416**	−0.403**	−0.444**	−0.447**	−0.436**
	(−3.00)	(−3.01)	(−2.92)	(−3.16)	(−3.19)	(−3.11)
Application Pages	−0.007*	−0.007*	−0.007*	−0.008*	−0.008*	−0.009*
	(−2.09)	(−2.11)	(−2.12)	(−2.38)	(−2.42)	(−2.46)
Reason: Economic				−0.782*	−0.782*	−0.787*
				(−2.54)	(−2.52)	(−2.53)
Reason: Family				0.126	0.124	0.155
				(0.39)	(0.38)	(0.47)
Reason: Ideology				−0.332	−0.355	−0.349
				(−1.04)	(−1.10)	(−1.09)
Reason: Freedom				0.506	0.503	0.523
				(1.75)	(1.72)	(1.80)
N	512	512	512	512	512	512
Pseudo R^2	0.117	0.117	0.116	0.136	0.136	0.136

Notes: The table displays logit models predicting the East German government's approval of emigration applications. The sample is respondents' first recorded applications. t-values (based on robust standard errors) are shown in parentheses. $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

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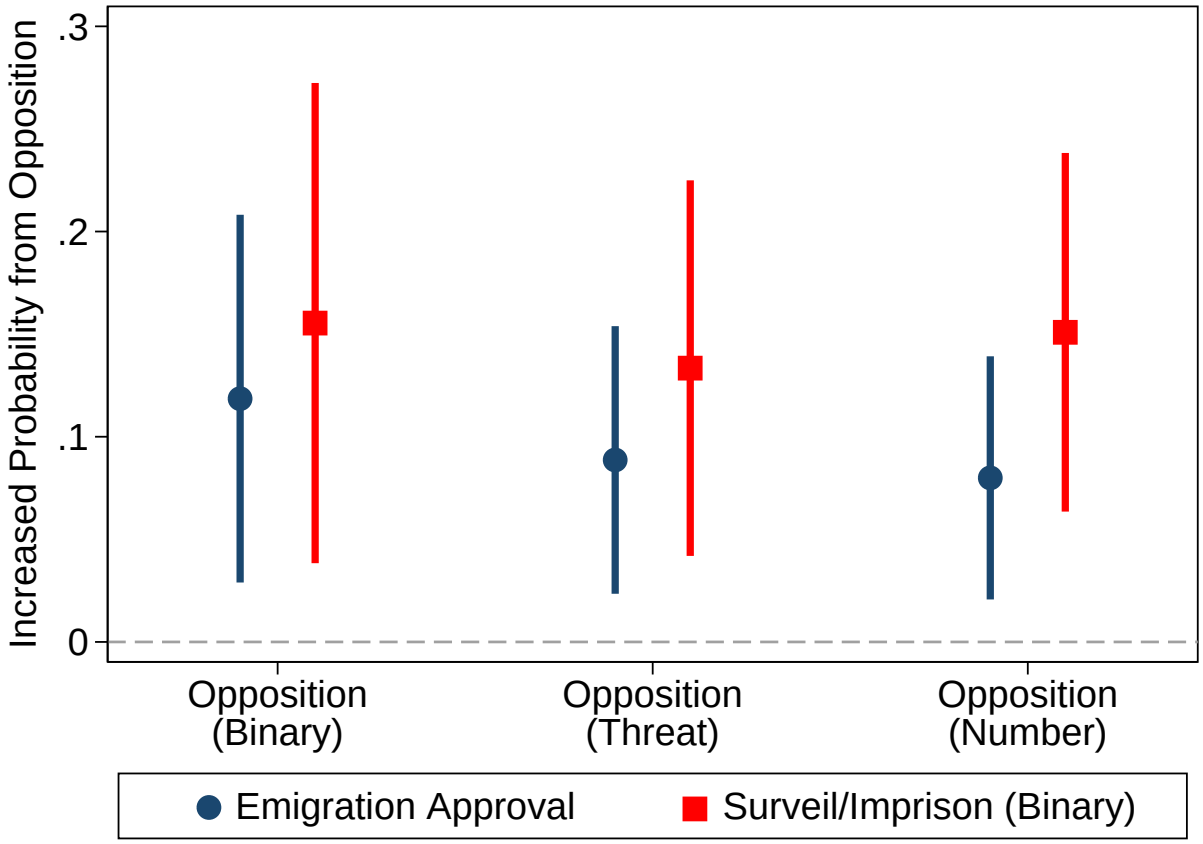
FIGURE 8. Estimated Effects of Opposition on Approval and Punishment



Note: The figure shows the estimated marginal effect of three measures of active opposition. For each measure, the left line shows the effect on *Emigration Approval* (from Models 1–3 of Table 2). The right line shows the effect on the binary measure of surveillance initiation or imprisonment in response to the application (from Models 1–3 of Table 4). Bars are 95% confidence intervals (using robust standard errors).

application. *Emigration Approval* is coded as 0 until the year of approval (if ever). We control for the year of observation and the number of years since the first application. For Models 4–6, we use a panel with a separate observation for each application. We control for the year of application and the application number.

Opposition (Binary) is again positive and significant (now at the 0.001 level in every model), and the same holds for the other two measures of opposition (see online appendix). Moving beyond solely replicating Table 2, we take advantage of the panel structure to examine how opposition's influence varies over time and application number. In the year panel, Model 2 tests whether opposition's effect varies by year, and Model 3 tests whether it varies by the applicant's total years of applying.[24] Surprisingly, we find no variation.

For the application panel, we compare opposition's effect in the entire sample to the effects in only

[24]To ease interpretation, the year term in the interaction is normalized to 0 at 1985, the year closest to the sample average.

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TABLE 3. Panel Models Predicting GDR Emigration Approval

	Year Panel			Application Panel		
DV = *Emigration Approval*	(1)	(2)	(3)	All Apps (4)	2nd+ App. (5)	3rd+ App. (6)
Opposition (Binary)	0.718***	0.707***	0.656***	0.778***	0.981***	1.224***
	(5.44)	(5.28)	(3.64)	(4.26)	(3.66)	(3.43)
Year	0.125***	0.115***	0.115***	0.162***	0.172***	0.180***
	(7.08)	(6.00)	(6.01)	(6.45)	(4.78)	(3.47)
Years Since First Application	0.060*	0.060*	0.054*			
	(2.46)	(2.45)	(1.97)			
Application Number				0.270***	0.106	0.034
				(5.14)	(1.54)	(0.34)
Female	0.303*	0.294*	0.293*	0.479**	0.385	0.387
	(2.54)	(2.46)	(2.45)	(3.04)	(1.65)	(1.03)
Age	0.015*	0.014*	0.015*	0.015	0.017	0.044*
	(2.46)	(2.41)	(2.44)	(1.76)	(1.41)	(2.25)
Elderly	1.204**	1.196**	1.184**	1.421**	0.143	−1.642
	(2.95)	(2.94)	(2.90)	(2.74)	(0.17)	(−1.24)
Occupational Class	−0.250***	−0.252***	−0.252***	−0.255**	−0.143	−0.319
	(−3.39)	(−3.42)	(−3.42)	(−2.63)	(−1.00)	(−1.42)
Application Pages	−0.005**	−0.005**	−0.005**	−0.005*	−0.005	−0.003
	(−3.03)	(−3.03)	(−2.99)	(−2.20)	(−1.90)	(−0.90)
Opposition × Year		0.046	0.044			
		(1.00)	(0.95)			
Opposition × Years Since First Application			0.027			
			(0.42)			
N	1,576	1,576	1,576	977	467	228
Pseudo R^2	0.074	0.075	0.075	0.101	0.072	0.106

Notes: The table displays panel logit models predicting the East German government's approval of emigration applications. The first three models use a respondent-year panel, whereas the next three use a respondent-application panel. Models 5 and 6 limit the sample to respondents' second or higher applications and third or higher. t-values (based on robust standard errors) are shown in parentheses. $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

the second or later applications and only the third or later. We find the effect is considerably larger in later applications.[25] Figure 9 compares the marginal effect sizes of opposition in first applications versus second or more, third or more, and fourth or more. The effect size nearly triples across the categories. This result perfectly illustrates the logic of the screening mechanism—it is above all the regime opponents who are determined to leave, applying again and again, that the regime is most intent on releasing. Notably, opposition does not increase its effect with *duration* of application, only the *number* of the application. Whereas the former might imply a willingness to wait patiently, the latter reveals a dogged persistence.

[25]The difference is significant if tested in the entire panel with interactions with application number.

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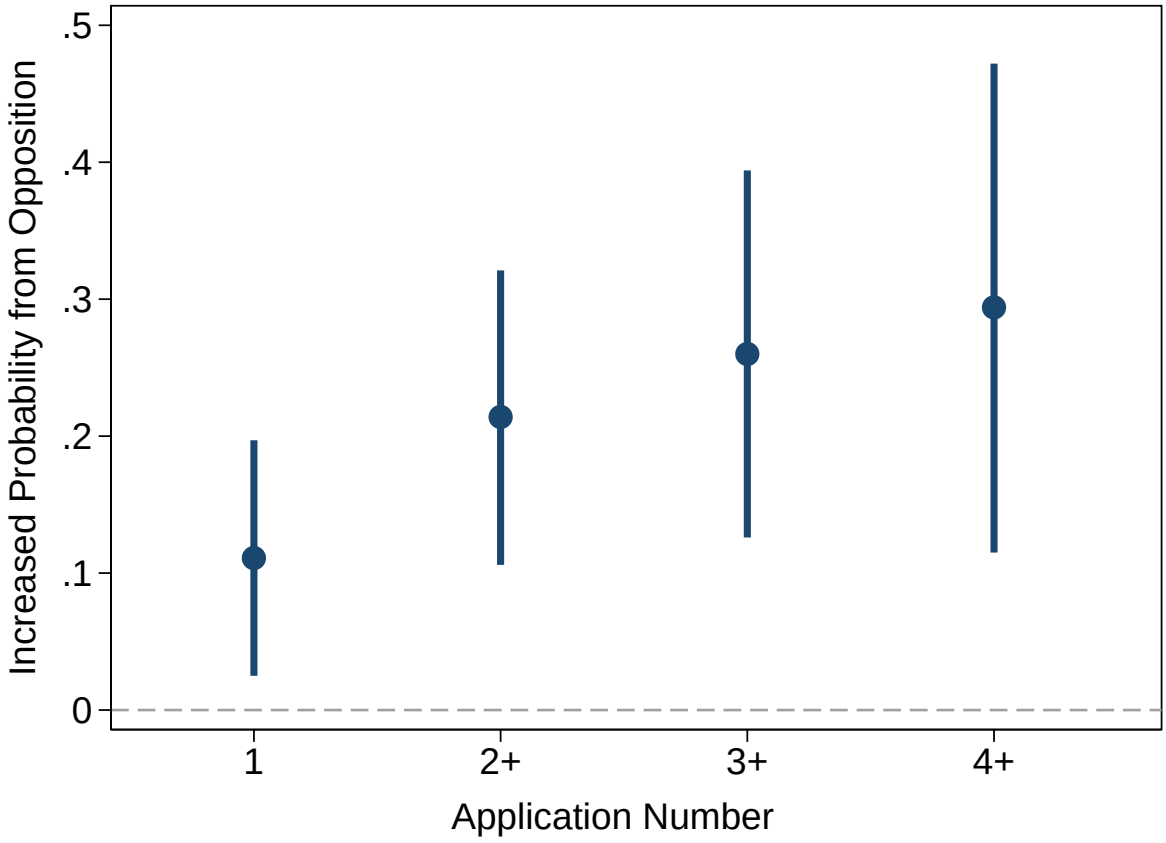
FIGURE 9. Opposition's Effect on Emigration Approval by Application Number



Note: The figure shows the estimated marginal effect of *Opposition (Binary)* on *Emigration Approval* depending on the application number. Bars are 95% confidence intervals (using robust standard errors).

Punishment

To make the targeted safety valve a viable strategy, the regime also needs to punish opponents for applying for emigration. In Table 4, we show results predicting punishment in response to applications. We use the same set of predictors from Models 1–3 in Table 2, again varying across three measures of opposition. We first predict a binary variable coded 1 if the regime reacted with either surveillance or imprisonment (using logit). Next, we predict a three-valued dependent variable coded 2 for imprisonment, 1 for surveillance only, and 0 for neither (using ordered logit). This takes into account the more severe punishment of imprisonment. Note that we only test these outcomes for the first application. Extending the models to a panel structure is problematic since punishment for first applications directly affects the ability to apply later (e.g., from imprisonment), and the sentence's often long duration makes it infeasible to distinguish punishment decisions across applications.

As with emigration approval, opposition is positive and significant for punishment in every model, confirming Hypothesis 2. The effect sizes from Models 1–3 are shown in Figure 8 alongside the emigration approval results for comparison. For Model 1, opposition increases the chance of punishment by 15.5%. Shifting from no to high-threat opposition in Model 2 increases the likelihood of punishment

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TABLE 4. Models Predicting GDR Punishment for Applying to Emigrate

DV =	*Surveil/Imprison (Binary)*			*Surveil/Imprison (Ordinal)*		
	(1)	(2)	(3)	(4)	(5)	(6)
Opposition (Binary)	0.730*			0.794**		
	(2.55)			(2.83)		
Opposition (Level)		0.628**			0.616**	
		(2.80)			(3.15)	
Opposition (Number)			0.713***			0.617***
			(3.30)			(3.84)
Year of Application	0.036	0.036	0.034	−0.009	−0.008	−0.012
	(1.20)	(1.21)	(1.14)	(−0.23)	(−0.23)	(−0.32)
Female	−0.226	−0.212	−0.226	−0.319	−0.304	−0.323
	(−1.08)	(−1.02)	(−1.09)	(−1.63)	(−1.56)	(−1.66)
Age	−0.009	−0.007	−0.009	−0.007	−0.005	−0.006
	(−0.81)	(−0.66)	(−0.78)	(−0.65)	(−0.44)	(−0.57)
Elderly	−2.415***	−2.469***	−2.412***	−2.565***	−2.642***	−2.580***
	(−3.50)	(−3.57)	(−3.49)	(−3.76)	(−3.87)	(−3.77)
Occupational Class	−0.285*	−0.287*	−0.278*	−0.324*	−0.324*	−0.312*
	(−2.20)	(−2.21)	(−2.14)	(−2.51)	(−2.52)	(−2.42)
Application Pages	0.004	0.004	0.004	0.003	0.003	0.002
	(0.87)	(0.85)	(0.78)	(0.77)	(0.75)	(0.66)
N	489	489	489	489	489	489
Pseudo R^2	0.090	0.092	0.096	0.080	0.081	0.083

Notes: The table displays models predicting the East German government's punishments in response to emigration applications. The sample is respondents' first recorded applications. The first three models use a logit to predict whether the respondent faced surveillance or imprisonment (as a binary variable). The last three models use an ordered logit to predict an ordinal coding of punishment (with imprisonment coded as most severe). t-values (based on robust standard errors) are shown in parentheses. $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

by 23.3%. The results are consistent when using the ordinal measure and controlling for the applicant's stated reasons for applying.

Looking at the remaining variables, the elderly are much less likely to be punished. This is expected since the regime supported the elderly leaving for economic reasons and faced no concerns about citizens selecting into this category. *Occupational Class* is also significantly negative for punishment, with a shift from unemployed to professional lowering the estimated chance of punishment by 18.2%. Unlike the elderly, higher-skilled East Germans faced more restrictions from leaving. This suggests that the regime was intent on keeping professionals at home and out of active punishment to ensure they could remain productive.

Robustness Checks

Table 5 summarizes several robustness checks of our results. For each alteration (listed at left), we show the coefficient on *Opposition (Binary)* from four different models. The first three predict *Emigration Approval* in the first-application model (adapting Model 1 of Table 2), the year panel (adapting Model

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TABLE 5. Robustness Checks for Emigration Approval and Punishment

DV =	*Emigration Approval*			*Surveil/ Imprison*
	1st Apps (1)	Year Panel (2)	App Panel (3)	1st Apps (4)
1989 Removed	0.655*	0.782***	0.822***	0.685*
	(2.39)	(5.54)	(4.12)	(2.40)
1984 Removed	0.591*	0.750***	0.973***	0.568
	(2.00)	(5.29)	(4.56)	(1.88)
Year Fixed Effects	0.627*	0.755***	0.748***	0.621*
	(2.30)	(5.65)	(3.99)	(2.16)
Add Family Application	0.727**	0.739***	0.787***	0.712*
	(2.69)	(5.59)	(4.28)	(2.47)
Add Family Ties	0.876**	0.930***	0.827***	0.758*
	(2.76)	(5.87)	(3.68)	(2.24)
Add Education	0.653*	0.706***	0.776***	0.729*
	(2.41)	(5.30)	(4.20)	(2.53)
Add Industry	0.660*	0.714***	0.781***	0.718*
	(2.45)	(5.39)	(4.26)	(2.51)

Notes: The table displays robustness checks for the estimated effect of *Opposition (Binary)* on emigration approval and punishment. The variations are listed at left. Results are shown for a sample of first applications for both outcomes. For the approval outcome, we also use panels constructed from all applicant-years and all applications. t-values (based on robust standard errors) are shown in parentheses. $^{*}p < 0.05$, $^{**}p < 0.01$, $^{***}p < 0.001$

1 of Table 3), and the application panel (adapting Model 4 of Table 3). The last model predicts *Surveil/Imprison (Binary)* for first applications (adapting Model 1 of Table 4). Each coefficient shown is from a separate logit model.

The first three checks address concerns that unusual regime dynamics might confound our results in specific periods. In particular, the regime faced a severe crisis throughout 1989, and thus decisions might not reflect a more general strategy. The same goes for the GDR's liberalizing experiment of 1984. Yet results are largely consistent if these years are removed; the lone exception is the prediction of punishment without 1984, which remains of a similar magnitude but just misses significance. The results are also robust to including year fixed effects.

The following four robustness checks include additional control variables. First, we control for whether the applicant submitted an official family application. Second, we control for two binary variables: whether the applicant had close family in West Germany and East Germany, respectively. The latter accounts for concerns that emigrants would remain in communication with their family members. Third, we control for a six-valued measure of education. Fourth, we control for whether the applicant works in government (including the military), social services (including education and health), or primary production (agriculture and manufacturing). As shown in Table 5, the results on opposition are highly robust to these alternate controls.

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None of the additional controls are robustly significant (see online appendix), although having East German family is significantly negative for approval in two samples. The lack of findings for education and industry are surprising and seemingly in tension with Hypothesis 3 and the results for occupational class. It suggests that the regime cared about holding on to professionals in all economic areas and did not focus on their education net of current occupational status. In other tests (see online appendix), we found no results (and no substantive change to our opposition findings) from married status, number of children, debt status, or previous attempts at illegal emigration.

CONCLUSION

Autocratic leaders—from the kings of feudal Europe to the Chinese Communist Party today—have long aspired to control exit. They continue to use a combination of exit visas, no-travel lists, passport controls, harassment, and bilateral labor agreements to allow some to exit while forcing others to stay. In this paper, we argue that autocrats craft these selective emigration policies to bolster their regime, strategically removing their political opponents to produce more quiescent populations while resisting the loss of productive citizens.

We examined our argument using novel exit application data from East Germany's state archives, the first individual-level test of an autocracy's choices on emigration. Applicants who expressed active opposition to the regime were more likely to be granted exit, while the regime also punished these opponents to deter feigned opposition and screen out all but the most determined dissidents. In addition, the regime considered the economic costs and benefits of letting applicants emigrate, with the elderly more likely to secure exit and professionals less likely.

Similar patterns of selective emigration appear in politically significant cases like Cuba's Mariel boatlift, the Soviet Union in the 1970s, and modern China and Russia. Future research should examine what predicts the adoption of selective emigration instead of free exit or total closure. Other work can examine how the targeting of emigrants varies across countries and across time. As we noted, calculations about economic costs and benefits of emigration are especially likely to differ by context. Contrasts could also be made within countries. Although we limited our study to East Berlin, it would be instructive to research regime decisions in rural areas where mass protest is less common.

Although East Germany is long gone, its unusually extensive records for its time help us understand how autocracies use selective exit. Increasingly, we see modern autocracies embracing new digital technologies, from facial recognition to spyware on cell phones, to collect similar information on their citizens. We expect these regimes to continue to use this data to select out those who might cause trouble, with far-reaching implications for the stability of autocracies and the character of the world's migrant communities.

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