

Economic Policy Making in Non-Democratic Settings: An examination of Chinese subsidies

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Why do governments use economic policy to selectively target benefits to certain actors? In democratic settings, selective targeting often occurs in response to electoral politics. But in non-democratic settings, what factors shape governments' economic policy decisions? I investigate this question by exploring government-funded producer subsidies in China. I find evidence that suggests the central government targets subsidies to select regions in an attempt to quell political unrest. Specifically, I find that the government provides more subsidies to a province as the number of labor protests in the province increases. In short, even in a non-democratic setting, some subsidies are motivated by political logic - that is, a desire to quell unrest and prevent it from spreading.

Why do governments use economic policy to selectively target benefits to certain actors? In democratic settings, selective targeting often occurs in response to electoral politics. To maximize their re-election chances, leaders in some democracies target economic benefits geographically - that is, to voters in select geographic locations (e.g. Rickard 2018, Jensen and Malesky 2018, Catalinac and Motolinia 2021). But in non-democratic settings, what factors shape governments' economic policy decisions? Do unelected leaders also target benefits to select geographic locations? If so, why? More generally, how do unelected leaders distribute government resources?

Just as leaders in democratic settings use economic policy to retain office, so too do unelected leaders. In order to increase their chances of retaining power, unelected leaders use economic policy to target benefits to select geographic locations. But rather than responding to voters' and their preferences, unelected leaders instead respond to actors who express their preferences through other political activities, such as protests. Protests are a form of collective action through which citizens' can express their interests. Protests provide unelected leaders with information about citizens' support for the status quo and even the regime.

Unelected leaders generally dislike protests. Protests can undermine their chances of retaining office, even if they are survive-able in the short run, because legitimacy can be undermined in incremental stages. Even if the government can weather a single protest, leaders may fear that their rule will be weakened over time by protest activities.

A further concern may be the possibility that isolated protests spread to nearby locations. A wave of protests that spread across a region may pose a serious challenge to leaders' tenure in office. In Sudan, for example, isolated protests subsequently escalated to wider-spread demonstrations and then to a general strike in 1985. As the protests escalated, protesters' demands became explicitly political, calling for the resignation of the president and his government. The head of state was ultimately ousted and significant alterations were made to the regime (Bienen and Gersovitz 1986).

Because unelected leaders are averse to risk and want to retain power, they have incentives to respond to protest activities. One response is via economic policy. Unelected leaders may use economic policy in an attempt to appease protestors. They may, for example, target economic benefits to parts of the country experiencing protests. By targeting economic benefits to areas of unrest, unelected leaders may be able to appease the protestors and keep protests from spreading.

I investigate the empirical validity of this argument in an important case, namely China. I do so via a study of subsidies - an increasingly frequent policy tool. Subsidies have become more and more common in China, and around the world, over the past decade. Since 2011, Chinese subsidies have more than quadrupled in value, rising from approximately 50 billion RMB in 2011 to 210 billion in 2021. Chinese subsidies have subsequently become a

flash-point in international trade and international relations (Bown 2019, Bown and Hillman 2019).

Investigating producer subsidies in China from 2009 onwards, I find evidence that suggests the government uses (some) subsidies in an attempt to pacify domestic unrest. I find a positive correlation between the number of labor protests in a province and the number of subsidies subsequently targeted to the region in the following year(s). The correlation emerges from an empirical model that includes province fixed effects, as well as time-varying economic variables measured at the province level, such as economic growth, the number of firms, FDI and exports.

Subsidies may be a particularly useful policy with which to respond to labor protests because these protests are economically-motivated disturbances. Workers are typically in the streets for economic reasons, such as job cuts, employment challenges, wage reductions and other sources of economic insecurity. Subsidies may address some of these concerns. By providing subsidies to producers in the region, the government may (indirectly) help employers maintain jobs and perhaps even increase employment opportunities. Subsidies may also stimulate the local economy and help to ensure workers are paid. These economic impacts may appease some protestors and help to quell domestic unrest. Even if all of these economic effects do not emerge, the government's action itself may be sufficient to quell at least some of the protestors' disquiet as the government can be said to be doing something - that is, responding to protestors' concerns via policy action.

A positive correlation emerges between the number of total labor protests in a province and the number of subsidies subsequently targeted to the region in the following year(s). However, this average correlation obscures variation in how the government responds to different types of labor protests. Not all labor protests engender subsidies. Protests by employees at foreign firms do not consistently trigger new government subsidies. In contrast, protests by employees at state owned enterprises (SOEs) do bring about additional subsidies. Perhaps this variation exists because protests by SOE employees are seen to pose a relatively greater threat to the leaders. At SOEs, the government itself is, in effect, the employer. Protests by SOE employees are therefore protests against the government. This may explain why the government responds relatively more actively to SOE protests.

In short, there appears to be an explicit political logic behind (some) Chinese subsidies. This finding has at least three important implications. First, the stability of the leadership may be at risk if the government's ability to fund subsidies comes under pressure. In an economic crisis, the government may be less able to fund subsidies. Without subsidies as an available policy tool with which to quell protests, protests may escalate and even spread - potentially spelling trouble for the leadership.

Second, geographic inequalities may arise as a result of the government's geographically-targeted subsidies. Geographic inequalities lie at the heart of contentious politics in many democracies, including the United States, the United Kingdom (e.g.

Ballard-Rosa et al. 2021), France and Italy. Geographic inequalities may similarly have deleterious effects on politics in non-democratic systems. Indeed, previous research demonstrates that geographic inequality threatens the stability and duration of autocratic regimes (Wallace 2013). Understanding the geographic distribution of subsidies, and the incentives behind it, is therefore important.

Finally, the rapid growth in subsidy spending suggests that the next “China shock” may be triggered by subsidies. Such a shock would depend less on market fundamentals and more on China’s future interventionist policy choices, some of which may be politically motivated.

Why subsidies?

Subsidies are defined as a financial contribution by a government that confers a benefit on its recipients (WTO 2006). (The word subsidy derives from the Latin word *subsidium*, which means ‘help, support, or assistance’ and in medieval times referred to a payment made to the king (Fryde 1983)). Subsidies can take a wide range of forms including cash grants, tax breaks, loans at below-market interest rates, loan guarantees, capital injections, guaranteed excessive rates of profit, below cost or free inputs including land and power, and purchasing goods from firms at inflated prices.

Subsidies entail costs, which include both real monetary costs and opportunity costs. Subsidies are funded by taxpayers and the money spent on subsidies is money that is no longer available for other programs, such as welfare or health care (Rickard 2012). As one government employee succinctly put it, “every subsidy I am giving is the money that the government could have spent elsewhere. Every subsidy means a primary healthcare centre I cannot build.” (Bibek Debroy. Quoted in the Economic Times, India Times, May 7, 2017). Observing who gets subsidies consequently illuminates governments’ priorities.

Subsidies have distributive consequences. They benefit some economic actors at the expense of others. Producer subsidies - the focus of this investigation - confer a benefit on economic actors, such as firms, industries or sectors. These policies therefore benefit relatively smaller groups, at the expense of larger groups, such as taxpayers. In some cases, these beneficiaries are geographically concentrated. For example, in 2016 the central government announced a new subsidy fund for the textile industry in Xinjiang. In this example, the subsidy is both industry-specific and geographically targeted. The generosity of such subsidies speaks to a governments’ willingness to redistribute wealth to select groups in certain geographic locations.

In China, spending on subsidies has increased dramatically over the past decade. In response to the global financial crisis in 2008, the Chinese government introduced a large stimulus package that totaled 4 trillion yuan (~586 billion USD). (Bai, Hsieh and Song 2016). Since 2011, subsidies have more than quadrupled in value, rising from approximately 50 billion yuan in 2011 to 210 billion in 2021.

Chinese subsidies have subsequently become a flash-point in international trade and international relations. Some observers suggest that it is precisely because of mass subsidization that China has become a dominant global supplier of a number of industrial products, including steel, aluminum, and solar panels (Bown and Hillman 2019). And a growing number of countries express disquiet about Chinese subsidies, including the US and the EU. China's subsidies and countervailing duty practices have been contested 19 times at the World Trade Organization (Evenett and Fritz 2021), despite the fact that many challengers fear extra-WTO retribution from China when contesting subsidies (Bown and Hillman 2019). The more frequent response to Chinese subsidies has been tariffs—first through increased use of countervailing duties, and then through other tariffs implemented during the US-China trade war (Bown 2019).

Some consider Chinese subsidies to be one of the most pressing issues facing the World Trade Organization (WTO) (Bown and Hillman 2019). In 2019, the US, the EU, and Japan undertook a trilateral process to confront the Chinese economic model, including its use of industrial subsidies. Understanding the motivation behind Chinese subsidies is consequently an important undertaking.

Furthermore, subsidies often play a meaningful role in the durability of non-democratic regimes. Research demonstrates that the withdrawal of subsidies can trigger protests and even regime change in non-democratic systems. Protests often erupt when consumer subsidies for food or fuel are withdrawn and prices subsequently rise (Bienen and Gersovitz 1986, Walton and Seddon 1994 Abouharb and Cingranelli 2007). In some cases, these protests set in motion regime change. In Sudan, for example, protests broke out in 1985 as a result of cuts to consumer subsidies (Bienen & Gersovitz 1986). As the protests escalated to demonstrations and then to a general strike, the protestors' demands became explicitly political. Protesters appealed for the resignation of the president and his government. The president was subsequently ousted; his loss of power was closely attendant upon subsidy cuts (Bienen & Gersovitz 1986). Similarly, in Peru, the military regime was significantly weakened by protests over subsidy cuts.

In this study, I make two novel innovations. First, I focus on producer subsidies rather than consumer subsidies. Producers often have greater political power than consumers and are typically better organized. Producers may consequently pose a greater threat of rebellion in non-democratic systems. Second, I focus on the provision of new subsidies, rather than the withdrawal of old subsidies. Historical experience and previous research has demonstrated why unelected leaders are reluctant to withdraw existing subsidies (e.g. Bienen and Gersovitz 1986, Walton and Seddon 1994, Abouharb and Cingranelli 2007). But why would they choose to implement news subsidies? This question has received far less attention to date.

Conventional wisdom

A large body of research examines economic policy-making in non-democratic settings. A common assertion made in this literature is that autocrats use economic policy to maximize

their own revenues (e.g. Niskanen 1997; Acemoglu & Robinson 2000). Some studies examine how autocrats allocate state resources between public and private goods (e.g. Bueno de Mesquita et al. 2003; Bueno de Mesquita and Smith 2010; Lake and Baum 2001). Others document the existence of political business cycles in non-democratic systems (e.g. Chen and Zhang 2021). Less research examines the geographic targeting of economic benefits by unelected leaders for political gain. However, some excellent studies examine the “urban bias” in redistribution in non-democracies (e.g. Wallace 2013, Ballard-Rosa 2020).

In this study, I investigate why unelected leaders target economic benefits to select regions within a country. This question has been investigated in democracies (e.g. Rickard 2018) but have received less attention in non-democracies (although see Maleskey).

As in democracies, competing arguments exist as to how leaders might target economic benefits. Some argue that unelected leaders are most likely to try to buy off citizens who have an affinity for the current regime because their support is the cheapest to acquire (Bueno de Mesquita et al. 2003). This logic suggests that subsidies will go disproportionately to members of the regime’s support base in the ‘selectorate’ (Bueno de Mesquita et al. 2003). However, others argue that unelected leaders will direct economic benefits to citizens who are discontent with the regime and particularly to those who are better able to impose costs via collective action (Oi and Zhao 2007). Both arguments agree that targeting will occur. The question is who benefits from policy targeting in non-democracies and how could we know?

I propose an empirical strategy that brings new evidence to this debate. This empirical strategy makes use of geography. Across geographic space, protests are unevenly distributed (Bienen and Gersovitz 1996). By observing where protests occur, researchers (and unelected leaders) can identify those parts of a country where citizens are relatively more discontent with the regime and also have a demonstrated ability to overcome the costs of collective action. If these areas subsequently receive more economic benefits, it would suggest that unelected leaders are targeting benefits to discontent citizens.

Argument

In political systems where voting does not occur (or is not free and fair), protests can serve as a mechanism for the transmission of information from citizens to leaders. Although protests are composed of individuals, they are a form of “collective action” due to their group nature. Such collective action can express discontent with governmental policies, the state of the economy, and/or the direction of the country. Observing protests, leaders glean information about citizens’ preferences and their willingness to support the status quo. In short, protests provide unelected leaders with information about citizens’ preferences.

Unelected leaders may feel compelled to respond to protests. If they do not respond to protests, the collective action may undermine social stability, particularly if aggrieved citizens use the opportunity to mobilize for other purposes beyond the initial cause of the protest (Wallace and Weiss 2015).

Unelected leaders may prefer to respond to protests using policy, rather than repress them. Single-party autocracies, like China, are typically less repressive than other types of autocracies (Davenport 2007). Outright repression generates risks. It may damage the regime's legitimacy and fuel further resistance. In some cases, repression itself can lead to regime change, as illustrated in the cases of Egypt and Tunisia in 2011 (Girod et al. 2018).

To minimize domestic unrest and the chances of losing power, unelected leaders may respond to protests using policy. Economic policy may be a particularly effective response when used to react to economic-based protests, such as labor protests.

Labor protests are increasingly common in China. "Ten years ago, if workers protested, local governments would probably arrest them. But the volume now is so great and so widespread – if you go to any city in China, there are probably several big protests by factory workers going on at any given time. So now they don't go in and arrest everybody" (Quote by Munro from Harris, Munro and Zhang 2006). Instead, the government seeks other ways to respond to labor protests.

The Chinese government is wary of labor protests for several reasons. First, labor demands sometimes go beyond "higher wages and benefits. They're now saying, we want an organisation for the long run" - that is, an independent union to represent workers' interests. (Harris, Munro and Zhang 2006). But Chinese officials are reluctant to allow independent trade unions because they recall how such organisations challenged communist regimes in Europe (The Economist October 15, 2022). The government fears that the emergence of bottom-up, worker-led unions would expand the possibilities for democratic space and civil society (Harris, Munro and Zhang 2006). (China does allow "government assisted trade unions", however, these organizations reflect official government positions (Wang Huiyao 2022).) Given this, the government has been reluctant to allow independent unions. Instead, they seek alternative economic responses. As the leader of the think-tank Centre for China and Globalization argues: "People are economically driven animals. If the economic benefits are large enough, they'll overcome some differences" (The Economist October 15, 2022).

Second, labor protests in China are increasingly coordinated. Anecdotal evidence suggests better organization, increased coordination of strikes and protests, and a more strategic focus, (Elfstrom and Kuruvilla 2014). The first example of coordination occurred in 2010 when a strike wave at Honda auto parts plants shut down the firm's operations nationwide. Workers at more than 20 other auto plants followed suit (IHLO 2010). The government is particularly fearful of protests spreading. As a result, they want a response that helps to minimize the chances that an isolated protest spreads across the region.

The changing nature of labor protests may demonstrate a new assertiveness amongst workers in China. Economic developments and political openings (themselves a result of economic changes) seems to have led to a new sense of possibility and therefore a new assertiveness on the part of workers. A similar "political process" of "continuous" change was documented by McAdam (1999) in the US with respect to the civil rights movement.

In China where citizens have, in many cases, experienced economic growth and some political openings, including the ability to protest without arrest, they may feel more assertive in making demands on the state. Although labor protests typically focus on economic concerns, and in some instances union representation, leaders fear that such protests could change direction and target the government itself (Wallace and Weiss 2015). In Sudan, for example, protests initially sparked by rising food costs became explicitly political with protestors ultimately demanding the removal of the leader.

The Chinese government is therefore under increasing pressure to reduce social instability, and labor protests in particular (Chen and Xu 2012). “The government’s main strategy is to isolate each (labor) protest and stop it from spreading” (Quote by Munro from Harris, Munro and Zhang 2006). One strategy to keep labor protests from spreading is to provide subsidies to employers in the region where protests occur. Subsidies can obviate the need for layoffs and keep citizens from becoming unemployed by enabling domestic producers to compete with lower-cost foreign made goods (either in export markets or via imports) (Corden 1957; McGillivray 2004). Employees in a subsidized industry or firm can benefit directly from subsidies via increased wages and more secure employment. Workers employed in related sectors in the local area may also benefit from government-funded subsidies, as employers seek additional labor. Subsidies may help to stimulate the local economy and thereby keep protests from spreading. Governments seeking to minimize labor unrest may therefore prioritize spending on subsidies in an effort to appease workers’ economic concerns (Senses 1988).

Subsidies have an additional advantage - they may help the government achieve their goal of economic growth (via exports). The Chinese regime has tied economic developmental goals and nationalist sentiments together in an attempt to sustain their rule through rising prosperity. Subsidies may therefore serve as a “dual use” policy tool. They may appease economic discontent, as expressed through labor protests, and simultaneously generate increased economic growth (via exports).

Of course, subsidies are just one possible policy tool governments can use to respond to protests. Others may include widely accessible social safety nets and/or labor protections. However, these policies are less useful for targeting benefits to select geographic areas. Furthermore, general policies typically entail larger economic costs – both in real terms and in terms of opportunity costs. Funding a fully accessible social safety net, for example, will be more expensive than funding select subsidies. And upgrading the country’s labor protections may risk China’s position as the “workshop” of the world, reducing inward FDI and China’s central position in many global value chains. For these reasons, the government may choose subsidies to respond to economically-motivated labor protests.

Given the absence of a widely accessible social safety net, subsidies may be a particularly valuable policy tool. In China, access to social insurance is limited. Migrant workers typically cannot access social insurance. While pension insurance coverage for urban workers is

88.5%, it is only 22.2% for migrant workers (Kuruville 2018). Without a widely accessible welfare state, subsidies may be needed to avert serious social problems (Rickard 2012). The Chinese government has, at least to date, been unwilling to extend social insurance. Given this reticence, they need an alternative policy tool to respond to protests. One option is subsidies. While subsidies can keep citizens from becoming unemployed, social welfare programs provide compensation for job losses only after such losses have been incurred, which may be too late to minimize the subsequent domestic unrest. Subsidies may therefore be a particularly expedient tool with which to respond to labor protests.

Key actor

The key actor in this argument is the central government. The central government sets the country's economic goals. National policymakers issue commands down through separate government and Party hierarchies (Naughton 2017). The central government conveys their priorities and encourages local actors to align their investments and policies with national targets.

In some instances, the central government gives provincial officials resources and instruments to carry out its goals (Naughton 2017). For example, provincial proposals for subsidies for investment and plans for projects are evaluated by the National Development and Reform Commission, NDRC, which then approves "block grants" of investment funds from the central government to the localities (Hou and Li 2021).

In effect, the provincial level passes along central government policies (Chen and Lang 2021). For example, in 2008, after the central government announced a stimulus plan in response to the global financial crisis, provincial governments subsequently announced complementary investment strategies (Zhou 2017) and injected additional funds into the local economy in line with the central government's directives (Hou and Li 2021). And although subsidies may be used in an effort to attract FDI to certain locations, China's "foreign direct investment (FDI) strategy is set by the central government." (Harris, Munro and Zhang 2006).

This institutional arrangement is described by both primary sources and interviews. In August 2016, the State Council issued the "Guiding Opinions on Promoting the Reform of the Division of Central and Local Fiscal Powers and Expenditure Responsibilities". In it, they said "the central government provides money to the regional governments to "ensure the financial resources required by local governments to implement relevant policies." The central government also provides money to regional governments to "ensure the effective implementation of the central decision-making and deployment, and guide local officials to start businesses."

In an interview with a provincial civil servant in March 2022, they said that subsidy provision: "is a process from the top national government to the province governments, and then to the smaller regional governments. The top national government will first set a goal in

terms of the politics and economy, and normally, some corresponding documents will be published. Then the province governments and the smaller regional governments will use these documents as the guideline to make the relevant policy based on their local conditions.” “The regional governments will follow the top guideline to support the specific industries.”

In effect, subsidies follow a two-step allocation process. First, the central government designs a subsidy program that targets benefits to a given province. Then, provincial leaders may decide which firms in the province receive financial support. In this study, I focus on the first step in the allocation process - that is, the central government’s decision to target subsidies geographically to select provinces.

Research design

The unit of analysis in this study is provinces, directly administered cities and autonomous regions. This unit of analysis differs from that in some related studies, which focus instead on Chinese firms (e.g. Chen and Zhang AJPS 2021, Hou and Li 2021). These studies seek to explain which firms (often within a single province or sector of the economy) receive subsidies. In contrast, I examine which *provinces* receive more subsidies and why. In other words, I examine the “first stage” of the allocation process described above.

In the “second stage” of the allocation process, insights from firm-level studies are useful. These studies help to explain which firms within a “privileged” province will receive subsidies. And it is precisely because of the two-stage allocation process, that firm-level studies often focus exclusively on the distribution of subsidies among firms within a single province (e.g. Hou and Li 2021). In contrast, my research examines the first-stage allocation decision – that is, the central government’s decision as to which provinces will receive (more) subsidies.

Subsidy Data

While Chinese subsidies have engendered substantial debate, there are surprisingly few measures of them. Subsidies are difficult to measure empirically as many countries’ subsidy programs are opaque and hard to quantify. Few countries publicly disclose their subsidies. A notable exception is Norway (Rickard 2018) and some states in Germany (see, for example, Rhineland-Palatinate’s subsidy report). Many countries also fail to report their subsidies to the World Trade Organization, as required by the Agreement on Subsidies and Countervailing Measures. Nearly half of all WTO members failed to make the required subsidy notifications due in 2017 by the end of 2018.

Measuring Chinese subsidies is a challenge. Neither governmental budget data nor WTO notifications supply the necessary information. Instead, recent best efforts rely on government statements and reports, as well as firm’s required statements. Using these documents as text-as-data generates the best estimates of Chinese subsidies to date. I compile various efforts using this methodology, including those by academics, policy-makers and

private firms and put together the most comprehensive data available on Chinese subsidies from 2009 to present. These data record policy changes (i.e. new subsidies), as opposed to taking stock of existing policies at a particular point in time.

Using these data, I identify (new) subsidies that are explicitly geographically-targeted - that is, made available to economic actors in certain geographic locations only. In 2016, for example, the government announced a new subsidy fund for the textile industry in Xinjiang. The state aid was available only to firms in the textile industry that were located in the province of Xinjiang. Textile firms in other parts of the country did not qualify. This is an example of a geographically-targeted subsidy; in this case, it is also industry-specific.

I geo-locate the beneficiaries of these geographically-targeted subsidies. These data are displayed in Figure 1. As Figure 1 illustrates, some provinces receive more subsidies than others. The most frequently targeted provinces include the coastal provinces of Guangdong and Jiangsu. However, subsidies are not exclusively targeted to coastal provinces. In fact, the far west province of Xinjiang is one of the most frequently targeted provinces. Additionally, the central province of Shaanxi and the north-east province Heilongjiang are nearly as frequently targeted as Guangdong and Jiangsu.

Protest Data

Measuring the frequency of collective action in China is also difficult. No official data on collective actions exist. Therefore, I compile data from various non-governmental sources, namely: 1) Elfstrom (2019) who collects data on labor protests from 2003-2012 from media reports and social media; and 2) the China Labor Bulletin (CLB), which documents labor-related protests (e.g. strikes, demonstrations, sit-ins, and road blockages) from 2011-2021 using media reports, social media, posts on Weibo, as well as on-the-ground interviews with Chinese workers.

The CLB data have been used previously by scholars to study collective action (e.g. Dimitrov and Zhang 2017, Goebel 2017). Additionally, the CLB is designated as a “reputable organization” by academic researchers at ACLED and the CLB numbers are largely corroborated by Wedeman (2009) and Chen (2009). (See Elfstrom and Kuruvilla 2014.)

For the overlapping years, the correlation between the CLB data and Elfstrom’s data is very high (0.98). The CLB’s protest numbers are generally larger, perhaps indicating that they have better coverage. It may also be because I only use Elfstrom’s protest data where they are coded as being “verified”. Where the two datasets overlap, I use the CLB data.

As a robustness check, I use data from ACLED, which codes protests using local, national and international sources, including media, vetted social media accounts, government and NGO reports, and partner organizations. A protest is defined by ACLED as a public demonstration with a political purpose or motivation in which the participants do not engage in violence, though violence may be used against them.

Provinces with larger populations may experience more protests simply as a function of their size. I therefore normalize the number of protests in a province by population. More precisely, I calculate the number of labor protests per 100,000 persons in a given province-year.

Empirical Model and Results

The unit of analysis is provinces, directly administered cities and autonomous regions. Provinces differ significantly from one another and therefore direct comparisons may be misleading, even when a battery of observable control variables are included. I therefore include province fixed effects in all of the estimated models. By doing so, I identify the average correlation between changes in the number of protests within a given province and changes in the number of new subsidies provided to the province.

I include several relevant control variables that may be related to the frequency of both protests and subsidies and change meaningfully over time within provinces. Specifically, I include the lag of a province's economic growth rate, exports, FDI and the number of firms in a province. More precisely, I estimate the following empirical model:

$$Subsidies_{it} = \beta_0 + \beta_1 Protests(per100k)_{it-1} + \beta X_{it-1} + \mu_i + \epsilon_{it}$$

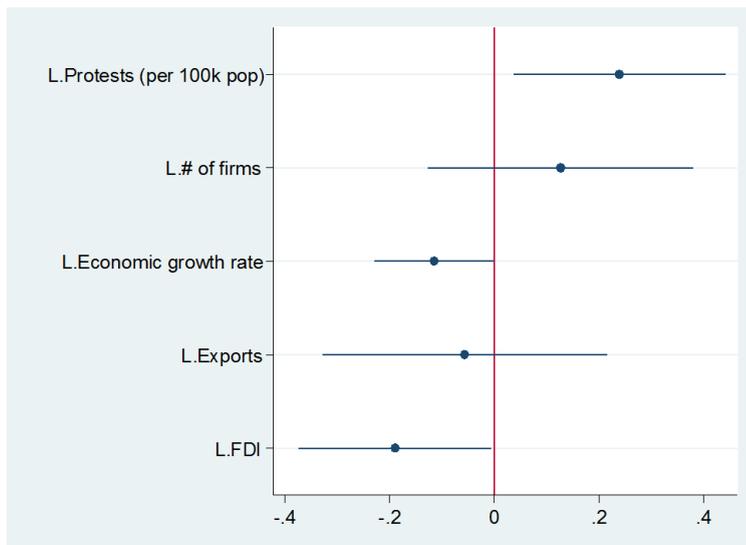
where i indicates province, and t indicates the year. βX_{it-1} is a vector of control variables that includes a province's economic growth rate, exports, FDI and the number of firms. μ_i is a province fixed effect and ϵ_{it} is a robust error term.

The results, reported graphically in Figure 2 below, show that more subsidies go to regions with relatively more labor protests, all else equal. For each additional protest per 100,000 people, the number of subsidies targeted to the province increases by more than 3 times the standard deviation in the following year.

This finding suggests that subsidies are supplied in an effort to minimize domestic unrest. This finding is consistent with other studies that find evidence that authoritarian regimes use redistributive policies to redress popular grievances and prevent aggrieved citizens from taking to the streets (e.g. Wintrobe 1998; Acemoglu and Robinson 2006; Wallace 2013). In Morocco, for example, the government increased spending on subsidies following riots in 1984 in an attempt to pacify protests and restore political stability (Bienen and Gersovitz 1996). (While a petrol price increase accompanied by high school student discontent over fees appeared to be the immediate trigger in Morocco, discontent had been building over food price increases for several months prior.)

My results come down squarely on one side in the debate over how autocratic leaders distribute government resources. Unelected leaders supply economic benefits to citizens who are discontent with the regime, as expressed via protests.

Figure 2: Standardized lagged coefficients



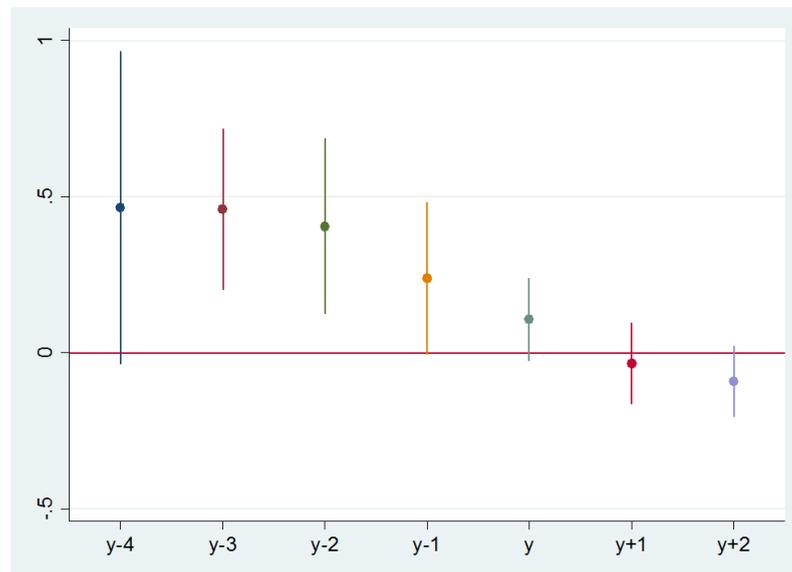
In addition to this explicit political logic, Chinese subsidies also reflect an economic logic. The estimated coefficients on *Economic Growth Rate*, *Exports* and *FDI* are all negatively signed (although not always statistically significant at conventional levels). These negative coefficients are consistent with the government’s objective of “common prosperity” and regional equality. The negative correlation between economic growth rates and subsidies, for example, accord with the government’s stated desire to remedy regional disparity, by “reviving the northeast” and “developing the west” (Houze Song 2022).

Taken together, these results support the widely-held belief that the objective of China’s state intervention has shifted from growth at any price to a more complex set of goals that includes (geographic) redistribution and social and economic security (Naughton 2017). As the Minister of Finance and Secretary of the Party Leadership Group stated, the government’s objective is to “deal with unbalanced development among regions” to achieve “co-operation between the eastern region and the central and western regions” by jointly making the “cake bigger”. He went on to say that: “This is different from the arrangement of traditional market economy countries. It has the distribution characteristics of socialism with Chinese characteristics.” (Source: China National People's Congress; The Eighteenth Lecture of the Special Lecture of the Standing Committee of the Thirteenth National People's Congress. August 12, 2020).

In addition to illustrating the political and economic motivations for subsidies in China, the results also confirm a well-known finding from democracies, namey that governmental budgets are sticky and policy-making takes time. Subsidies do not respond immediately to protests. Protests in year t are not correlated with subsidies in year t , as illustrated in Figure 3 below. Instead, it takes time for the government to design and implement targeted subsidies in response to protests. The estimated coefficients on *Protests* suggest that it takes somewhere between one to three years. This result may reflect the fact that I use the date of a subsidy’s implementation (rather than announcement). However, it may also demonstrate that policy

making takes time and this is true even in China where a single political party governs a state-led economy with relatively few veto players (i.e. political actors with the ability to veto a policy decision) (Tsebelis 2002).

Figure 3: Estimated *Protest* coefficients



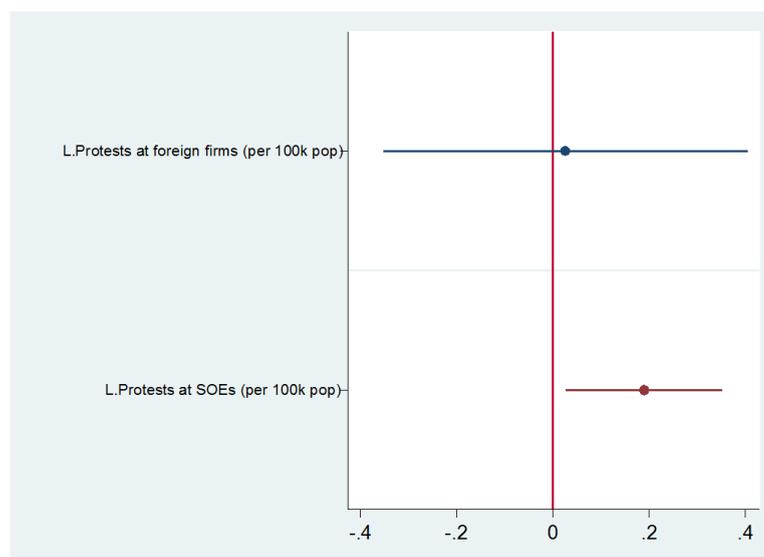
Suggestive evidence of mechanism

I argue that the correlation between protests and subsidies arises from the government's desire to quell domestic unrest and retain power. But of course, this is just one possible interpretation. Additional support for this interpretation comes from disaggregating labor protests. I identify two different types of labor protests: 1) those undertaken by employees of state owned enterprises (SOEs); and 2) those undertaken by employees of foreign firms. I normalize the number of protests by population - calculating the number of each type of protest per 100,000 persons in a given province-year.

The government may feel relatively greater pressure to respond to protests by employees of SOEs because the government is, in effect, their employer. And, indeed, protests by workers at state-owned enterprises are typically triggered by governmental actions, such as restructuring, privatisations, mergers and bankruptcies (Harris, Munro and Zhang 2006). (From 1997 to 2001, Chinese state-owned enterprises laid off over 30 million people (Gallagher and Hanson 2009). Note, however, that these layoffs pre-date my sample period.) Additionally, "The state enterprise workers have protested over demands such as better severance pay, termination packages and buying out their accumulated seniority, which is often cut short. There are also demands that the government find new jobs for them because most laid-off workers, especially in the industrial areas, if they are over forty, there is a high chance they will never work again." (Harris, Munro and Zhang 2006).

Because protests by SOE employees are, in effect, protests against the government, they may be viewed as a relatively greater threat to the Communist Party than other types of labor protests. As a result, the government may be more likely to react to these types of protests with subsidies than other types of labor protests. And indeed, while a positive and robust correlation does emerge between SOE protests and subsidies, a similar correlation does not exist between protests at foreign firms and subsidies, as illustrated in Figure 4 below. Regions that experience more protests by employees at foreign firms do not receive any more subsidies, all else equal. The government may calculate that such protests are seen as having less to do with the government's actions and economic policies, particularly as compared with SOE protests. Therefore, the government may be less willing to respond with subsidies.

Figure 4: Different types of labor protests



Implications

Even in non-democracies where leaders are free from electoral constraints, some economic policies appear to follow an explicitly political logic. In China, (some) subsidies are targeted to areas with relatively more labor protests, all else equal. This suggests that at least some subsidies are supplied by unelected leaders in an attempt to quell domestic unrest and retain power. This finding counters the commonplace view that China's Communist party "pays no heed to dissenting individuals or unhappy minorities" (The Economist October 15, 2022). But of course, minimizing labor protests may also be economically sensible if multinational firms value workplace calm.

Future research is needed to examine the extent to which these results generalize beyond China. Different types of authoritarian regimes exist and their responses to social pressures may vary (e.g. Wintrobe 1998; Geddes 1999; Gandhi 2008). Leaders' willingness to provide economic benefits in response to protests may be a function of both the type of

authoritarianism present in a country, as well as the nature of the regime's economic policies (Gallagher and Hanson 2009).

These results have at least three important implications. First, if, as my results suggest, the Chinese government uses subsidies to quell domestic unrest, then the stability of the regime may be at risk if the government's ability to fund subsidies comes under pressure due to financial constraints. Second, by targeting subsidies to some regions more often than others, the government may generate or exacerbate geographic inequalities. Growing geographic inequalities could pose a challenge for the regime, as argued persuasively by Wallace (2013). Finally, the rapid growth in subsidy spending suggests that the next "China shock" may be triggered by subsidies. Such a shock would depend less on market fundamentals and more on China's future interventionist policy choices, some of which may be politically motivated.