# 13. CENTRAL BANK INDEPENDENCE AND THE FATE OF AUTHORITARIAN REGIMES

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A large number of authoritarian regimes have reformed their central banks, increasing legal independence. Yet, it is unclear whether economic institutions – like independent central banks – can be effective in such regimes. We argue that when central bank independence overlaps with the collective decision-making in dominant-party regimes – one particular type of authoritarian ruling regime – dictators have diminished control over the central bank. Thus the central bank becomes effective enough to restrict expansionary fiscal policy, reducing the mobilization of supporters through patronage and increasing authoritarian breakdown risk. Analyses detailed in Bodea et al. (2019)<sup>4</sup> using data from 1970 to 2012 in 94 authoritarian regimes find that high central bank independence in dominant-party regimes increases the likelihood of authoritarian breakdown. Moreover, independent central banks in dominant-party regimes contribute to lower fiscal expenditures. Our work shows that promoting central bank reforms in authoritarian regimes may lead to the expected economic effects, but the political effect of such institutions can be unexpected.

## 13.1. CENTRAL BANK INDEPENDENCE IN AUTHORITARIAN REGIMES

A large literature has looked into why governments might delegate monetary policy to independent central banks and the consequences of delegation (Alesina and Summers 1993; Barro 1986; Barro and Gordon 1983; Bodea and Hicks 2015a, 2015b; Broz 2002; Cukierman 1992; Garriga 2016; Grilli, Masciandaro, and Tabellini 1991; Keefer and Stasavage 2003; Kydland and Prescott 1977; Maxfield 1997; McNamara 2003; Polillo and Guillén 2005; Rogoff 1985). Most research links the effectiveness of central bank independence – regarding price stability, foreign direct investment, fiscal policy, or better conditions in credit

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markets – to the presence of democratic institutions (Bernhard 1998; Bodea and Higashijima 2017; Bodea 2013; Broz 2002; Hallerberg 2002; Keefer and Stasavage 2003; Stasavage 2003). These findings might suggest that autocracies have little reason to grant independence to their central banks. And, with some exceptions (Boylan 1998; Garriga and Meseguer 2019; Garriga and Rodriguez 2020; Johnson 2016; Maxfield 1997), the role of central bank independence in autocracies has been underexplored.

It is not rare, however, for authoritarian regimes to reform their central banks, increasing independence. Between 1970 and 2010, there were 130 reforms in authoritarian regimes.<sup>5</sup> Of those reforms, 102 increased and 28 decreased the legal independence of the central bank.<sup>6</sup> Figure 1 (a) shows the yearly average number of central bank reforms in autocracies.<sup>7</sup> The average CBI level in autocracies is 0.45, which is very close to the average of democratic observations in the same period (0.48).

There is an interesting variance across authoritarian regimes. If we follow Geddes et al. (2014) and distinguish dominant-party dictatorships<sup>8</sup> along other types of autocratic regimes like monarchies and personalist,<sup>9</sup> and military regimes, the frequency and direction of reforms differ depending on the type of authoritarian regime (Figure 1 (b)).

Dominant-party regimes and personalist dictatorships reform their central banks more often than other types of authoritarian regimes – more than 4.7% of the observations in these groups register a reform affecting CBI. Regarding the average levels of legal central bank independence, personalist dictatorships have the highest level of independence, followed by similar levels of CBI for monarchies, dominant-party regimes, and military regimes (Table 1).

The distribution of reforms throughout the autocratic rule is relatively uniform (Figure 2 (a)). In particular, the percentage of observations experiencing central bank reforms is not especially high in the years before regime breakdown. In the whole sample, 3.6% of observations experience a reform in any year prior to regime breakdown, and we observe a similar frequency (3.8%) in the five years prior to regime breakdown (Figure 2 (b)). We do not observe an increasing

Data on regime types is from Geddes et al. (2014).

For example, Chile (1975), Malaysia (1994), Mexico (1993), Mongolia (1991), and Singapore (1999 and 2007) increased their central bank independence under non-democratic rule. In contrast, other autocracies such as Congo (2002), El Salvador (1973 and 1982), Poland (1972), Venezuela (2009), and Zambia (1985) decreased the statutory independence of their central banks.

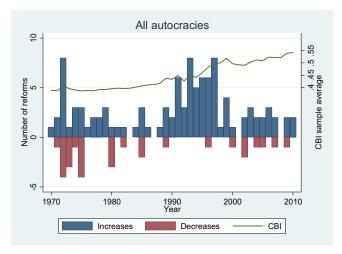
Central bank independence is from Garriga (2016) and is coded as the Cukierman et al. (1992) index, ranging from 0 (lowest) to 1 (highest) levels of CBI.

Party-based or dominant-party dictatorships are a major type of modern autocracies where "control over policy, leadership selection, and the security apparatus is in the hands of a ruling party" (Geddes et al. 2014, 318).

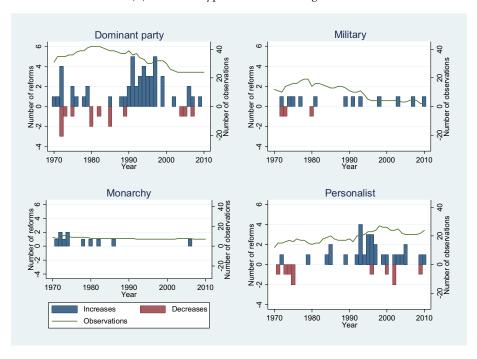
Personalist dictatorships are autocracies where control over policy, leadership selection, and the security apparatus are gripped by an individual leader.

Figure 1: Central bank reforms and average level of bank independence

## (a) All autocracies



### (b) Different types of autocratic regimes



Regime		CBI reforms		CBI level		
	N	Decrease CBI	Increase CBI	Average	Median	Std. dev
Dominant party	1,356	14 (1%)	50 (3.7%)	.412	.436	.178
Military regime	399	4 (1%)	12 (3%)	.401	.368	.178
Monarchy	322	0	11 (3.4%)	.416	.483	.155
Personalist dictator	789	10 (1.3%)	29 (3.7%)	.521	.501	.192
Democracy	2,183	28 (1.2%)	174 (8%)	.521	.480	.225
Full sample	6,753	56	276	.476	.490	.203

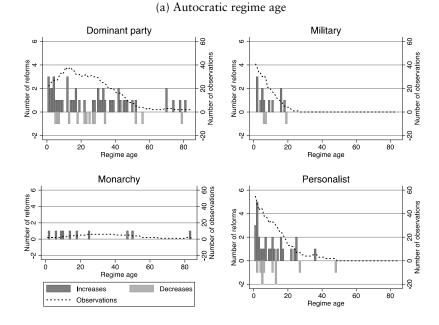
Table 1: Number of CBI reforms of different regime types (Geddes, et al. 2014)

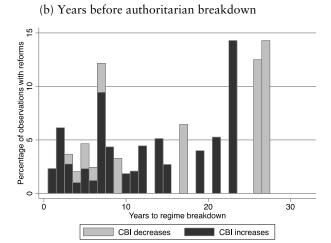
number of reforms immediately prior to regime breakdowns. Of the 130 central bank reforms in autocracies, four occurred the year before the authoritarian breakdown and five happened two years before the regime change (Figure 2(c)).

(4.1%)

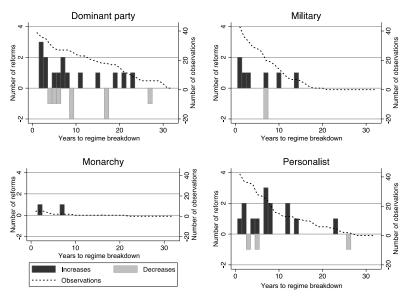
(.8%)

Figure 2: Central bank reforms and average levels of central bank independence





### (c) Time to regime breakdown



### 13.2. How can CBI constrain dictators

Price stability – the key focus of modern central banks – may be better achieved in democracies because these regimes' greater number of veto players, transparency and rule of law allow central banks to pursue their mandate independent from political interference. Nonetheless, independent central banks also perform other functions, and may have different effects across institutional settings.

To understand the effects of independent central banks in authoritarian regimes, it is necessary to recognize that central banks may be granted independence to pursue other goals, beyond inflation control. For example, authoritarian leaders may use CBI to lock-in liberal policies or tie the hands of future rulers (Boylan 1998). Others argue that the autonomy of central banks results from the accumulation of different rulers' decisions in past critical junctures (Bell and Feng 2014; Taylor 2009). Yet another string of research points to the informational value of removing the central bank from political control (Bernhard 1998; Crowe 2008). 11

Why would autocracies choose to delegate monetary policy and agree to legislation that nominally gives more autonomy to the central bank? If we assume that the fundamental concern of autocrats is to maintain power, then a nominally independent central bank can play two important roles. Central bank independence can create the appearance of competence on economic issues both domestically and internationally (Bodea and Hicks 2015a; Johnson 2016; Maxfield 1997; Polillo and Guillén 2005), and it can deflect the blame for economic hardship when the economy deteriorates (Kane 1974, 1980).

Our paper (Bodea, Garriga, and Higashijima 2019) shows that even if autocracies grant independence to central banks to signal competence or to defuse blame, this independence may be binding under certain conditions. The argument is that, within the broad category of authoritarian countries, dominant-party authoritarian regimes provide such conditions. Examples of party-based autocracies include those of Mexico's Institutional Revolutionary Party (PRI), Malaysia's United Malays National Organization, China's Communist Party, and Zimbabwe African National Union – Patriotic Front.

In the political science literature, the conventional wisdom is that dominant-party dictatorships are very stable, or, in other words, resilient to regime change (Geddes 1999; Magaloni 2008; Svolik 2012). Two mechanisms seem to explain why dominant-party regimes experience fewer breakdowns. First, because decision-making in these regimes is made by the dictator and other party cadres, the dictator cannot arbitrarily use policy and patronage, independent of ruling elites' preferences (Boix and Svolik 2013; Frantz and Ezrow 2011; Magaloni 2008). This, in turn, reduces the incentives of ruling elites to stage coups d'état.<sup>12</sup>

<sup>&</sup>lt;sup>10</sup> In line with the literature on "endogenous institutional development" (Capoccia 2016).

Bernhard (1998) argues that the key job of a central bank – monetary policy – is highly technical and can have unexpected consequences and uneven effects. Because of this, and because they lack the expertise, coalition partners and back-bench legislators prefer policy information and a monetary policy that is carried out by an independent central bank.

By institutionalizing party organizations, dictatorships create a functioning collective-decision making body through which governing elites reduce the risk of dictators abusing power or monopolizing policy and leadership selection(Geddes, Wright, and Frantz 2014). For example, Gehlbach and Keefer (2012, 622) argue that "collectively-organized supporters are better able to impose a variety of checks on leaders and to impose sanctions for predatory behavior that would not otherwise be possible." Frantz and Ezrow (2011) find that, in party-based regimes where the elite coalition acts as a collective veto player, policy stability tends to be high. The institutionalization of a dominant party also allows the autocrat to develop patterned career promotions among ruling elites, thereby mitigating ruling elites' political uncertainty (Magaloni 2008).

Second, party-based regimes also have an advantage in incorporating the preferences of the party's rank-and-file using well-organized networks (Greene 2010; Magaloni 2006). Having grassroots support, autocrats use the party to mobilize supporters. The mobilization of mass support under dominant-party regimes relies heavily on the distribution of patronage, with examples stretching from Mexico, to Malaysia and Egypt (Blaydes 2011; Greene 2010; Magaloni and Kricheli 2010; Pepinsky 2007). In many dominant-party regimes, "the party controls land titles, fertilizers, subsidized housing, scholarships, food, construction materials, and many other privileges, which are distributed to the most loyal members of the party" (Magaloni and Kricheli 2010, 128).

Our argument pits the first mechanism against the second, with central bank independence as the intervening variable. The participation of the party cadres in the decision-making process – the "elite-level constraint" in dominant party regimes – can work as veto point constraints, enabling the central bank to become a *de facto* power player in economic policy. In such cases, relatively autonomous central bankers, acting in compliance with the original intent of the reform law, may prevent the dictator from engaging in expansionary fiscal policy. This should undermine the second mechanism argued to prolong the tenure of party-based regimes – patronage distribution – and have important consequences for their survival.

## 13.3. DOMINANT PARTY AUTOCRACIES, CBI AND FISCAL POLICY LIMIT

Dictatorships with a dominant party are especially resilient to regime change. Yet, the two main reasons that make them resilient could also increase their vulnerability to fiscal policy constraints. Autocratic veto players can help give *de facto* teeth to legally independent central banks who can then act as a break on patronage spending, a key contributor to the longevity of party-based dictatorships. We explain the mechanism in more detail.

First, in dominant-party regimes, other high-ranking party members need to agree with the dictator to make decisions. As such, genuine differences can emerge among ruling elites with regards to fiscal policy choices, with some viewing spending limits as key to attracting investors (Ahlquist 2006) and thus insuring long-term autocratic stability. Compared to personalist and military dictatorships, Ezrow and Frantz (2011) suggest that ruling elites' preferences in dominant-party regimes are the most heterogeneous. This elite-level constraint can protect the central bank's preference for controlled spending.

Examples include Taiwan's Kuomingtang, Mexico's PRI, and Botswana's Democratic Party.

In addition to acting as a political constraint, the dominant party may also help disseminate information on the dictator's behavior to party cadres, including information produced by the central bank about the state of the economy and future prospects. This, in turn, allows the ruling elites the possibility of collective action when dictators misbehave (Gehlbach and Keefer 2011, 2012). Due to the availability of information in dominant-party regimes, autocrats may find it more difficult to transgress the stipulated autonomy of central bankers.

These elite-level constraints pale in comparison with the ones in democracies. Yet, it is plausible that in dominant-party regimes, the dictator – who prefers to spend resources on a broad array of party supporters – may not be able to go fully against central bankers' preferences and the preferences of other elites for sustainable fiscal policy. Consequently, central bank independence can reduce dictator's reliance on expansionary fiscal policy.

Second, dominant-party regimes rely heavily on patronage to mobilize supporters. Therefore, if central banks restrain fiscal spending in autocracies, this is most likely to influence party-based regimes. Under party-based regimes, the autocrat is able to garner a large number of votes using extensive party networks. However, this is possible as long as the autocrat can buy loyalty via various ways of patronage distribution. For instance, Greene (2010) argues that dominant-party regimes' success in winning consecutive elections and surviving, depends primarily on their ability to politicize public resources for partisan purposes. The opposite should be holding then, as well: Dominant-party rule is weakened if the dictator's access to public resources is limited. This need to engage in extensive spending should make dominant-party regimes especially vulnerable to fiscal constraints. With limits on resources, dominant-party dictators may find it difficult to mobilize supporters and stay in power, paving a way for authoritarian breakdown.

We argue that central bank independence influences autocratic breakdown in autocratic regimes with both elite-level constraints and dependence on patronage distribution (i.e., dominant-party regimes). It is important thus to note that, although royal families in monarchies (Herb 1999) and military juntas in some military regimes (Barros 2001) may work as elite-level constraints, those regimes' survival does not hinge on support based on the distribution of local public goods or patronage. Therefore, the fiscal limits that the combination of CBI and elite constraints generate need not affect the survival of monarchic and military regimes. Similarly, personalist regimes rely heavily on patronage to sustain political support, but personal dictators are not constrained by other ruling elites. In such situations, legal CBI need not be binding, and thus should not influence the likelihood of regime breakdown.

The implication from our discussion is that an independent central bank influences the ruler's ability to retain power in dominant-party regimes. The empirical estimations in Bodea, Garriga, and Higashijima (2019) test the following main hypothesis: Central bank independence increases the likelihood of regime collapse in dominant-party regimes.

#### 13.4. EMPIRICAL FINDINGS

For the empirical estimations, a dichotomous dependent variable captures regime breakdown following Geddes et al.'s (2014). This variable is coded one when the autocratic regime has collapsed, that is, when there are "fundamental changes in the formal and informal rules that identify the group from which leaders can be chosen and determine who can influence policy (the leadership group)" (Wright, Frantz, and Geddes 2015, 288).

The models include two main independent variables. The first one identifies whether a dominant-party regime is in power, as opposed to other types of autocratic rule – military, personalist, and monarchic regimes. The categorization depends on "whether control over policy, leadership selection, and the security apparatus is in the hands of a ruling party (party-based dictatorships), a royal family (monarchies), the military (rule by the military institution), or a narrower group centered around an individual dictator (personalist dictatorship)"(Geddes, Wright, and Frantz 2014, 318). The regime type variables are dichotomous – if a country is a party-based regime, then it is coded as 1 and zero otherwise.

A second independent variable codes central bank independence. We use Garriga's (2016) dataset of legal CBI, which covers democracies and autocracies from 1970-2012. CBI is measured as an index that codes countries' laws governing the central bank, based on the well-known Cukierman et al. (1992) measure.

Figure 3 shows kernel density plots for the duration of party-based regimes at different levels of CBI. Dominant-party regimes with low CBI survive longer than those with high independence. Consistent with our story, the mean survival for party-based regimes with low CBI is 38 years, whereas dominant-party regimes with high CBI average 24 years.

To test more formally our hypothesis, we interact the party-based regime dummy with the CBI index. We expect a negative coefficient for the party-based regime, as the literature finds, but a positive coefficient for the interaction term with CBI, showing that party-based regimes turn more unstable at higher levels of CBI. Based on the literature, the models include additional control variables: logged GDP per capita, GDP growth, trade openness (imports plus exports relative to GDP), logged population (all from World Development Indicators, WDI), oil-gas

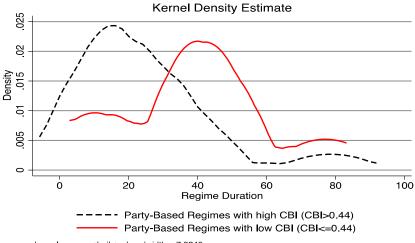


Figure 3: Dominant-Party Regime Duration with low/high CBI

kernel = epanechnikov, bandwidth = 7.8249

Note: The average CBI index in autocracies is 0.44. Low CBI<=0.44; High CBI>0.44.

value per capita (Ross 2012), and the average level of democracy for a country's neighbors. Our empirical models are pooled probit models, <sup>14</sup> and our sample includes all autocratic regimes (countries that are autocratic at time t-1) to examine if they experience regime changes in year t.

In all the models, the interaction term is positive and statistically significant. Figure 4 shows a graphical representation of those results. The figure shows predicted probabilities (from Model 3, Table 1 in Bodea, Garriga & Higashijima 2019) of regime breakdown at different levels of CBI for dominant-party regimes. When CBI is low (0.1), the predicted probability of party-based regime breakdown is approximately 5% and statistically insignificant. When CBI is high (0.8), the predicted probability increases to 18% and is statistically significant at the 5% level.

Not every autocratic breakdown leads to democracy. Between 1970 and 2010, only 52% of regime breakdowns resulted in democratic transitions. Our paper examines whether our theory holds for both transitions to democracy, and regime breakdowns that lead to other forms of authoritarian rule. The pattern we find is similar for both kinds of transitions: At higher levels of CBI, dominant-party regimes have a higher predicted probability of experiencing democratic and autocratic transitions. These results suggest that central bank reforms under

<sup>14</sup> The main models use year and regional dummies to control for time and region-specific unobservable confounding factors, as well as cubic splines and country clustered robust standard errors. In the paper we discuss estimation strategies aimed at dealing with unobserved heterogeneity and endogeneity.

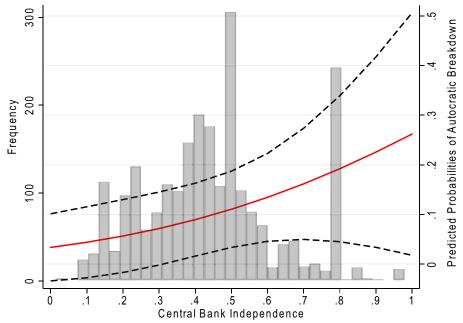


Figure 4: Predicted probabilities of breakdown for dominant-party regimes

Note: The full line indicates predicted probabilities of autocratic breakdown in dominant party regimes. (The dotted lines indicate 95% confidence intervals (based on Model 3 of Table I in Bodea, Garriga & Higashijima 2019).)

party-based regimes do not always lead to democratic reforms. The presence of independent central banks, thus, is not able to predict the likely outcome of a regime breakdown.

Our argument suggests that central bank independence in party-based autocracies encourages autocratic breakdown because independent central bankers place limits on dictators' patronage spending. Our paper tests whether CBI is negatively associated with fiscal spending in dominant-party regimes. The dependent variable is the annual fiscal expenditure as a share of the GDP. We show that when CBI is low, party-based regimes tend to spend more, which is consistent with the conventional wisdom that dominant-party regimes rely on patronage distribution to maintain power. This includes a handful of party-based regimes famous for spending and extensive patronage distribution via party networks like Mugabe's Zimbabwe, China, KMT's Taiwan, Suharto's Indonesia, Singapore, and Vietnam. Yet, as the central bank becomes more independent, party-based regimes refrain from spending.

### 13.5. ILLUSTRATIONS: EGYPT AND MEXICO

Two examples support the plausibility of our argument. First, if legal delegation was toothless, autocrats should not have reasons to adjust the law governing the relationship between the central bank and the government. Yet, in Egypt where the National Democracy Party helped the regime maintain ruling elite cohesion (Brownlee 2009) and put together dense networks of patronage among the elites (Blaydes 2011), two reforms significantly restrained the independence of the powerful central bank. These reforms returned tools to control the macroeconomy to the government: The 1975 reform was explicitly generous in expanding the limits of central bank lending to the government, and it also eliminated the prohibition for the central bank's governor to hold other public offices. Similarly, in 2004, following an open disagreement between the Egyptian central bank and the ministry of finance, additional reforms subordinated the goal of price stability to the general economic policy of the state, shortened the tenure of the central bank's governor and, also, enacted even vaguer limits to the government's ability to use the central bank's credit. As a result, fiscal and monetary policy authority became "highly centralized in the executive branch with the president and his cabal of experts essentially free to act without restriction" (Blaydes 2011, 79). In fact, with a less autonomous central bank, the Egyptian government resorted to a variety of patronage distribution using the party's extensive networks, such as pension raises, bonuses payment for government employees, and vote-buying.

Mexico illustrates the opposite situation, where an independent central bank appears to de facto influence government's fiscal policy. Mexico under the long rule of the PRI is an archetypical case of dominant party regime. For decades, the party controlled the country thanks to a tight network of allegiances in exchange for patronage (Magaloni and Kricheli 2010). In 1993, Mexico granted independence to its central bank. The official reason to promote the reform was the need to control inflation. However, by the time of the central bank reform, inflation was the lowest in twenty years. Moreover, all surrounding policy debates point out that, in fact, the main concern was to signal competence to international audiences: During the debates in the Mexican Chamber of Deputies, federal deputies mentioned on record that central bank independence was devised as means to attract foreign capital especially in case that the uncertain NAFTA negotiations failed. This is consistent with the view of Mexican analysts of the reasons for the reform (Meyer-Serra 1995, 105), and with scholars showing that this mechanism works for other developing countries (Bodea and Hicks 2015, Maxfield 1997). The political elites were convinced that central bank independence was a condition to transmit confidence to investors. Except for some members of the opposition Party of the Democratic Revolution (PRD), there were no voices pointing at eventual additional or undesirable constraints to policy that central bank independence could arise.

Importantly, grating independence to the central bank was not a concession to the opposition. In fact, the opposition PRD, born out of a split of the PRI was against central bank independence. The PRD opposed the bill, arguing for the convenience of subordinating monetary policy to developmental needs. The other main opposition party, the National Action Party (PAN) supported the bill, but on the grounds of the need of attracting foreign investment (Cámara de Diputados del Congreso de los Estados Unidos Mexicanos 1993). However, the PAN was not in a position to extract concessions from the PRI at the time. Furthermore, the reform to the central bank is considered the only exception in a context of lack of institutional constraints to the governing elite (Meyer-Serra 1995, 106).

The reform happened during the tenure of Miguel Mancera as Governor of the Central Bank (1994-1997). The first Governor appointed under the new law was Guillermo Ortiz Martinez (1998-2003). Scholars stress that this appointment was not a mere bureaucratic decision: "For the first time in the 78 years of existence of the central bank, the appointment of its highest authority was subject of open discussion among the powers of the Federation, including different voices and lobby from the civil society" (Chávez G. 2004, 7). Since 1996, the Mexican central bank started making an active use of an instrument called "corto" ("short"), that restricts liquidity in the system to eliminate inflationary pressures. The central bank started relying on the corto every time that spending started growing rapidly, risking the achievement of the inflation target (Garriga and del Tedesco Lins 2014). This imposed additional hurdles on the government to finance its spending. Furthermore, in 1997 the central bank started publishing its forecasts, which put in the spotlight any excess in spending that might increase inflationary pressures. Mexican scholars indicate that the "style of monetary policy" implemented by the central bank limited the fiscal deficit (Díaz González 2010, 39).

Figure 5 shows the fiscal expenditure in Mexico. In line with our expectation, fiscal spending is consistently low after the 1993 central bank reform and the size of the electoral spending cycle is also reduced. The top panel in Figure 1 indicates the years of the central bank reform (1993), and of the regime breakdown (2000). Fiscal expenditure is low since 1992, a year before the central bank reform. However, the average level of fiscal expenditure is lower. For example, in the five years before the central bank reform, the fiscal spending was 19.5% of the Mexican GDP, on average, with a standard deviation of 4 percentage points. In the 5 years after the central bank was granted with independence, spending averages 15.2% of the GDP, with a standard deviation of 0.5 percentage points. Furthermore, fiscal expenditure not only remains low after the 1993 central bank reform, but it also shows less volatility around elections. The lower panel in Figure 1 includes dotted vertical lines that indicate election years (1988, 1994, and 2000, the year of the regime breakdown). Before 1993, generally speaking,

in election years, spending increases compared to precedent years. After the reform granting independence to the central bank, spending was kept relatively low, and there is little variance around the presidential elections in 1994 and 2000.

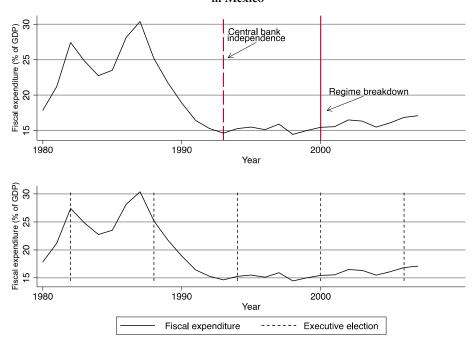


Figure 5: Fiscal expenditure, central bank reform, elections, and regime breakdown in Mexico

Note: The data ends in 2008, because of the onset of the economic and financial crisis, which influenced global fiscal policy responses and changed the scale of fiscal spending and deficits.

#### 13.6. CONCLUSION

Our research suggests a dilemma autocrats face when institutionalizing central banks: Although CBI could allow autocrats to deflect blame for economic hardship and signal competence on economic issues, it also diminishes the dictators' ability to spend, which increases the likelihood of regime breakdown in party-based regimes.

By showing that *de jure* – legal – central bank independence is associated with a higher likelihood of breakdown in the most resilient type of autocracy (Geddes 1999; Magaloni 2008; Svolik 2012), <sup>15</sup> our article also prompt us to rethink the

Our paper shows that this result is not driven by a selection mechanism that would explain both central bank reforms and autocratic breakdown.

extent of the effects of formal economic institutions in authoritarian regimes. These findings are in line with more research showing that institutional reforms, and specially central bank independence, have (Bjørnskov and Rode 2019; Garriga and Meseguer 2019; Garriga and Rodriguez 2020; Jensen, Malesky, and Weymouth 2014; Pepinsky 2014). These findings not only challenge the comparative political economy literature that has shown thus far that only in democracies can central banks be effective, autonomous actors, but they also have important policy implications. Promoting reforms, especially monetary reforms, in autocracies may lead to the expected economic effects, but the political effect of such institutions can be unexpected and are yet to be fully understood.

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