

Investing in stability: Economic interdependence, coups d'état, and the capitalist peace

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Jonathan Powell

Department of Political Science, University of Central Florida

Mwita Chacha

Department of Political Science & International Relations, Nazarbayev University

Abstract

The capitalist peace thesis argues transnational economic ties have a pacifying effect on interstate relations. An extension of this literature reports that economic ties can prompt belligerents in civil conflicts to peacefully resolve their disputes and can attract third-party intervention from states with strong economic ties. This pacifying effect of economic ties, we argue, is applicable in the context of coups d'état: as a state becomes more economically interdependent with the rest of the world, the opportunity costs of domestic political disturbances are raised for both the targeted state and its financial partners. These costs – potential economic losses and a damaged economic reputation – influence belligerents in the state to use constitutional means to resolve their disputes while providing stronger incentives to foreign economic partners to influence the calculus of these belligerents as they consider the coup attempt. We test this argument quantitatively by investigating the influence of a dozen indicators of economic openness on coups in a global sample of states from 1952 to 2007. Our findings demonstrate the applicability of the capitalist peace thesis to coups d'état, manifestations of political uncertainty that are less likely to be accompanied by substantial loss of life or destruction of infrastructure.

Keywords

capitalist peace, coups d'état, political instability

Introduction

By the 1960s many Latin American states had for over a century been struggling with military intervention in politics. The same can be said for Middle Eastern countries such as Iraq, which had seen repeated coups since the end of the mandate period. Decolonization in Africa in the mid to late 20th century, meanwhile, brought a marked increase in the number of coups witnessed globally. While coups were not previously an uncommon occurrence, the influx of new, weak states into the international system led to an unprecedented number of unconstitutional seizures of power. Accompanying this was an increase in scholarly efforts attempting to systematically explain the phenomenon. Purported causes varied, ranging from ethnic antagonisms to foreign

meddling and underdevelopment (e.g. David, 1987; Jenkins & Kposowa, 1992; McGowan & Johnson, 1984). Qualitative assessments highlighted poverty to explain coups, and coup leaders themselves often justified their actions by pointing to underdevelopment, economic stagnation, or economic mismanagement (Wiking, 1983).

However, statistical assessments of coup activity have found very inconsistent support for the connection between economics and coups (Belkin & Schofer, 2003). The influential study by Londregan & Poole (1990), for example, argued for a strong 'coup

Corresponding author:

mwita.chacha@nu.edu.kz

inhibiting' effect of wealth, though more recent efforts have found an insignificant association (e.g. Thyne, 2010). Explanations for these inconsistencies are varied. Janowitz (1964) noted that more wealth can help remove some of the underlying causes for coup activity, but concedes that wealth itself can make a coup more attractive to plotters. Zimmerman (1983), meanwhile, claimed a conditional influence in which economic growth can stabilize poor states (see also Huntington, 1968; Kim, 2016). A recent quantitative assessment of Latin America found both GDP per capita and growth rate to be insignificantly associated with coups (Thyne, 2010), while a global assessment argued that level of wealth was important in the sense that it would provide leaders a tool to invest in political survival (Powell, 2012). Finally, Kim (2016), while noting inconsistencies in prior studies, argues the confusion is largely due to measurement error.

Whatever the explanation, the current state of the literature provides a limited picture of the role of economics in coup activity. Beyond both theoretical and empirical inconsistencies, scholars have tended to investigate economics via simplistic measures such as GDP per capita or economic growth rate. Beyond domestic economics, we contend that the literature has given insufficient attention to two dynamics. First, studies have tended to focus on negative developments that make a coup more desirable or more necessary, largely ignoring a range of economic conditions that could stabilize a regime. Second, there remains a paucity of efforts to systematically investigate *international* aspects of the effect of economics on coups. There are hints of the importance of international economic links. Thyne (2010) found signals and aid sent from the United States to be strongly associated with coup activity. Berger et al. (2013), meanwhile, found that coups undertaken with support from the United States or the Soviet Union during the Cold War would lead to increased trade with the coup backers, pointing to the importance of international ties.

We move beyond these few studies that link international factors with coup activity by arguing that international economic links affect coup dynamics. In contrast to prior offerings that consider narrow domestic aspects of wealth or economic performance, we argue that economic interdependence and market economics more generally are unexplored but crucial components of the coup story. Economic interdependence generates benefits for states by offering a more stable environment for economic activity and governance, and providing foreign actors incentives to help maintain that stability.

Governments and those opposed to them are aware of the potential long-term negative economic consequences of having an unstable political environment. These potential consequences, we argue, enter into the calculus of elites in a state at risk of coups, increasing the likelihood that the government and its opposition will pursue other less violent and more constitutional means to resolve political disputes, and thus ensure the international economic reputation of their state remains undamaged.

The article makes contributions to three broad areas of research. First, the findings suggest that the capitalist peace can be extended to unconstitutional seizures of power in the form of coups d'état. Though coups are often conflated with civil conflict, these are distinct events undertaken by different actors. The trend also shows that the capitalist peace can be extended to forms of political instability that do not usually involve mass casualties or loss of infrastructure, as seen in the study of interstate and intrastate wars. Second, the findings fill an important gap in the study of coups. Though recent years have seen a number of excellent studies on the subject, these have generally paid scant attention to international economics. Finally, the results contribute to the study of political survival. In the following sections we draw out our theoretical argument while building on the capitalist peace literature. We then discuss relevant efforts from the study of coups, describe our data and research design, and test the argument. Results suggest that economic interdependence is in fact strongly tied to less coup activity. We close the article with a discussion of future avenues for research.

Economic interdependence, the capitalist peace, and domestic civil disturbances

Economists since Adam Smith have documented the causal mechanisms through which economic openness increases growth and development for states. The move towards economic liberalism in the 1970s, according to Dornbusch (1992), may have been driven by a desire to remedy decades of economic stagnation under statist and protectionist policies. In finding positive correlations between trade openness and growth, Sachs et al. (1995) and Wacziarg & Welch (2008) argue that openness enables states to acquire capital goods vital for export-oriented production that ultimately facilitates economic growth. Others examine trade liberalization among post-communist states and using measures of economic globalization find that trade openness positively affects economic growth (Dreher, 2006; Fidrmuc, 2003).

The democratic and capitalist peace literature further clarifies the effect of trade ties on international security. On the one hand, Maoz & Russett (1993) and Oneal et al. (1996) find that democracy and economic interdependence reduce the likelihood of interstate conflicts; a result they argue corroborates Emanuel Kant's perpetual peace and the democratic peace theses. On the other hand, others within this literature attribute trade ties as solely responsible for this interstate peace. Polachek (1980: 61) argues 'the price of being belligerent is an implicit price that increases with the level of trade [... therefore] the greater the amount of trade, the higher the price of conflict, and the less the amount of conflict demanded'. Later works from Oneal & Russett (1997: 268) seem to support this independent effect of economic ties on interstate conflicts: 'trade is a mutually beneficial interaction, giving each party a stake in the economic well-being of the other – and in avoiding militarized disputes'. This economic interdependence effect on interstate disputes continues to generate a plethora of research affirming that it is economic ties and not regime type that are responsible for the few instances of interstate disputes (Gartzke & Li, 2003; Hegre, Oneal & Russett, 2010; Mousseau, 2012; Oneal & Russett, 1999).¹

Within the domestic politics setting, civil conflicts have been noted to adversely affect states' economic welfare. Collier (1999: 181) argues civil conflict has a devastating effect on economic growth 'because [civil] war directly reduces production and partly because it causes a gradual loss of the capital stock due to destruction, dissaving, and the substitution of portfolios abroad'. Magee & Massoud (2011) conclude that even lower levels of conflict reduce international trade given that such internal conflicts epitomize political instability. Corroborating this finding, Murdoch & Sandler (2002a: 92) observe that '[c]ivil wars can drive away foreign direct investment, an important source of savings, as foreign investors redirect their funds to less risky and more politically stable countries [... and additionally] battles and guerilla activities can destroy private and social capital while inhibiting market exchanges'.²

The negative economic consequences of domestic political disturbances have influenced the trajectories of these types of conflicts. Gleditsch (2007: 299)

hypothesizes that the extent to which a state is integrated into the global economy will affect the calculus of domestic belligerents, proposing that '[i]n a situation where levels of interdependence are high and conflict would be costly to many actors, affected interests will have an incentive to lobby governments for solutions to accommodate aggrieved groups and limit disruption'. Barbieri & Reuveny (2005) share Gleditsch's application of the capitalist peace thesis to the domestic setting, but go further to argue that economic openness reduces the likelihood of civil conflicts because such openness engenders contacts between transnational economic actors who are likely to lobby would-be belligerents to resolve their conflicts peacefully. Blanton & Apodaca (2007), Bussmann & Schneider (2007), and Martin, Mayer & Thoenig (2008) corroborate these dampening effects that economic openness has on civil conflict occurrence. Others including Aydin (2012), Kathman (2011), and Stojek & Chacha (2015) see the extent of beneficial economic ties with other states influencing the likelihood that third-party actors will intervene in civil conflicts that threaten their economic interests in the affected countries.

This body of literature identifies three claims relevant to the argument we propose. First, economic interdependence has a positive effect on the economic welfare of states. Second, domestic political disturbances have an adverse effect on these gains. Third, states are less likely to resolve their disputes violently when potential losses can motivate third-party states to help remedy any conflicts. We extend from these claims to argue that economic openness reduces the likelihood of coup occurrence. Following Barbieri & Reuveny (2005) and Gleditsch (2007), we see economic openness as affecting the calculus of belligerent parties by highlighting the potential losses that a coup can bring on the economic welfare of the state and the incentives provided to outside actors to intervene. We now proceed to apply these lessons directly to the study of coups.

Economic interdependence and coups d'état

Commentaries on specific coup events and analyses of coup leaders often focus on individual self-interest as a primary motive for launching a coup. History is replete with kleptocratic strongmen such as Mobutu Sese Seko or Jean-Bédél Bokassa, whose post-coup legacies seemed little more than an effort to pilfer as much from the state as possible. Others point to the wider organizational interests of the military, while more recent literature has pointed to general conditions that make a coup more

¹ For recent contributions see also Dafoe & Kelsey (2014) and Krieger & Meierrieks (2015).

² Kang & Meernik (2005), Koubi (2005), and Murdoch & Sandler (2002b, 2004) similarly find that civil conflicts are detrimental to economic development.

feasible (e.g. Leon, 2014). However, scant attention has been given to the effect transnational economic ties have on the calculus of would-be coup instigators. This is unfortunate given economic openness has dramatically increased in recent decades, just as the world witnessed a precipitous decline in coups. We argue a neglected aspect explaining these dynamics concerns the influence of economic interdependence. The theoretical model we map out builds on the findings of the capitalist peace and the rationalist calculations of political elites and coup-plotters. The potential negative consequences of coups, as a result of increasing economic interdependence, can motivate these domestic political actors to reconsider coups and resolve disputes through less volatile means that do not damage a state's international economic reputation and limit domestic economic losses.

Basic trends support this narrative. Since the 1970s, the very period Dornbusch (1992) identified as the commencement of global promotion of economic openness, the world has seen a steady decline in coup activity. Just as the capitalist peace literature supposes that actors will make calculations regarding the costs and benefits of engaging in violent interstate or intrastate war, recent empirical work on coups has also identified a strong applicability of the rational actor model. This body of rational choice literature points to conditions under which coups are more likely because the probability of success is high or the potential pay-off makes the risks acceptable. For example, a poorly functioning economy will provide elites with an incentive to oust ineffectual leaders not for the sake of seizing power for themselves, but rather to forestall a mass revolution that could bring sweeping changes to the state's economic classes (Acemoglu & Robinson, 2001). In other words, coups become more likely because elites make the rational decision that the costs associated with a risky coup are offset by the expected utility of the attempt. Conspirators also respond to cues from outside of the state, as seen with hostile signals sent from the United States promoting coups in Latin America during the Cold War (Thyne, 2010). Coup-plotters may also be likely to accept more risk if the payoff of the coup greatly outweighs maintaining the status quo. For instance, coups are more likely to be attempted during civil war but are less likely to succeed, indicating that conspirators are more willing to take risks when the status quo is dire (Bell & Koga, forthcoming). Finally, regardless of motive, coups are less likely to be attempted if the conspirators face a strong coup-proofing apparatus (Böhmelet & Pilster, 2015).

We build from these rationalist explanations of coups, taking an approach similar to Acemoglu & Robinson

(2001) to argue that plotters will assess the long-term economic implications of their decision for the state.³ Increased economic interdependence influences decisionmakers on the plotters' side by increasing potential economic losses through mechanisms that closely coincide with prior findings in the capitalist peace literature. We identify three. First, the unconstitutional nature of coups inherently undermines a state's investment climate and calls into question the durability of prior legal frameworks. Because they foment political uncertainty, coups undermine the reputation of a country as one that respects property rights and ensures the rule of law – key considerations for any potential foreign investor. On this aspect, Fosu (2002: 333) argues that coups can 'intensify the uncertainty of the political and economic atmosphere, as the existing government resorts to harsh measures to deal with the perpetrators'. He further elaborates measures governments could take that 'include declarations of states of emergency and suspensions of freedom, as well as property confiscation, imprisonment, and even executions of the accused'. Alesina et al. (1996: 191) find that political instability reduces economic growth because such instability 'increases policy uncertainty, which has negative effects on productive economic decisions such as investment and saving'. Distinguishing between regular and irregular political changes, Feng (1997) similarly argues that coups 'instill great amounts of uncertainty in the market-place, slowing down and even reversing economic growth'. Asiedu (2006) further elaborates the adverse effects coups can have on foreign direct investment, showing that coups tend to introduce uncertainty and political risk that discourage potential investors. This conforms with other literature that has pointed to coups as having 'deleterious' effects on capital productivity, growth rates, and investment (Alesina & Perotti, 1996; Barro, 1991; Easterly & Levine, 1997; Fosu, 1992; Longo & Sekkat, 2004). Such trends are unsurprising given the preservation of trade agreements,

³ Our argument assumes that would-be coup-plotters are interested in overthrowing the incumbent government for both their own personal gain and to advance the interests of the state. As such, they are also concerned about the effect of their actions on the welfare of the state. In the event that the coup-plotters only care about their own personal aggrandizement, we argue that such coup action still has to contend with potential international action such as economic sanctions that can reduce any rents the plotters expected when launching their coup. More importantly, we expect the incumbent government, already occupying power, to be more likely to use more force to thwart such a coup action since such a coup threatens its hold on power and the rents the incumbent derives from its economically interdependent country.

property rights, even the constitution itself, is an uncertain prospect in a post-coup environment. Even the 'good' coup in Portugal (1974) illustrates these economic losses. Though credited for establishing Portuguese democracy and even ushering in democracy's 'third wave', this coup resulted in Portugal's balance of payments deficits increasing to over \$1 billion, unemployment mushrooming to over 15%, 'lagging production', massive increases in food imports, and low levels of private investment (Howe, 1976; Huntington, 1991).

Second, coups can spiral into violent domestic conflicts that damage economic-facilitating infrastructure such as transport and communication links, increase insecurity that prevents market exchanges, and instigate major capital flight (e.g. Collier, 1999). For example, the 1999 coup saw Côte d'Ivoire's GDP per capita plummet from \$1,847 in 1998 to \$1,531 in 2000. The Associated Press described the coup as 'a surprising turn of events in a country known for stability and prosperity' (*New York Times*, 1999). The government subsequently cancelled payments on foreign debts, leading to the cancellation of virtually all foreign assistance (*New York Times*, 2000). The new government soon witnessed a boost in crime and began engaging in summary execution of alleged bandits (Onishi, 2000). A subsequent coup attempt in 2002 proved even more disastrous, leading the state into civil war.⁴

Third, the international community has come to react more frequently and much more negatively toward coup-born governments (Shannon et al., 2015). Failure to conform to international norms will result in marked financial losses for the afflicted state and higher levels of interdependence make 'economic coercion' a substantially stronger policy tool (Marinov, 2005). These responses have been formalized with the emergence and proliferation of anti-coup legal frameworks in the United States, the European Union, and international organizations such as the Organization of American States and African Union. Included in these frameworks are explicit calls for the implementation of economic sanctions by member states in the event of a coup (Wobig, 2015). It is then unsurprising that hostile interstate signals lead to a quick demise of coup-born regimes (Souaré, 2014; Thyne et al., 2015).

Aside from promoting constitutional rule, the backers of these institutional anti-coup frameworks also have economic motives. In 1996 Paraguay, for example, a dispute between President Juan Carlos Wasmosy and Army Chief of Staff Lino Cesar Oviedo was expected by many to result in a coup. Financial partners offered the president military help and sent diplomats to Asunción, expressing strong concern 'about the possible economic impact of a coup in Paraguay' (Sims, 1996). In line with capitalist peace arguments, the potential for economic fall-out among Paraguay's foreign partners prompted swift international mediation and a coup was avoided pre-emptively.

These three causal paths suggest that coups can be unattractive endeavors when they threaten the economic welfare of a state. Because of these negative consequences of coups on a state's international standing and domestic welfare, we expect elites to be less likely to consider them as a political strategy. Domestically, elites have a strong incentive to maintain an attractive investment destination and convey an image as a reliable source and buyer of goods and services to potential foreign financial partners. These trends lead us to propose the following hypothesis that we test quantitatively in the next section:

Hypothesis 1: Increased economic openness and contract-based economies reduce the likelihood of coup attempts.

Data and methods

We examine a global sample of states between the years 1952 and 2007 to test our hypothesis.⁵ The number of countries in our models varies between 134 and 152 as a result of data availability.

Dependent variable

Coup d'état refers to 'illegal and overt attempts by the military or other elites within the state apparatus to unseat the sitting executive' (Powell & Thyne, 2011: 252). We adopt a dichotomous measure that considers whether or not at least one coup attempt occurred during the year. Our theory is primarily concerned with the decision to attempt a coup, so we utilize all bona fide

⁴ Powell & Thyne (2011: Appendix) point to 38 cases of coup efforts that are coded as civil conflict in the Uppsala/PRIO Armed Conflict Dataset (Gleditsch et al., 2002). Another 12 cases acted as direct catalysts for civil war.

⁵ Recognizing variability in the geographic and temporal scope of the control variables, we offer additional specifications with a reduced set of controls in Table A8 of the Online appendix. Limitations in the oil revenues and cabinet measure, for example, generally lead to a loss of between 10% and 20% of the data. These reduced models provide estimates effectively identical to those reported here.

attempts at seizing power described by Powell & Thyne (2011).

Independent variables of interest

Our hypothesis anticipates that a variety of factors related to international market dynamics will have an influence on coup activity. We have made a concerted effort to incorporate a wide range of indicators of economic openness to ensure any results are not dependent on the peculiarities of a specific measure. All of the independent variables are lagged one year and are expected to have a negative association with coup activity.⁶

Trade openness reflects a state's combined value of imports and exports as a percentage of its gross domestic product (World Bank, 2014). This measure has been extensively used in the capitalist peace literature to capture the extent to which a state is connected to the global economy, and thus its economic relevance to other states in the international system (Gartzke & Li, 2003; Li & Reuveny, 2003).

Foreign direct investment (FDI) accounts for foreign investment inflows as a percentage of its gross domestic product (World Bank, 2014). FDI gauges the importance of a country to foreign investors by evaluating the extent to which the country attracts foreign investment flows (see Bussman, 2010).

Contract intensive money (CIM) is the degree to which the state displays market-protecting institutions (Souva, Smith & Rowan, 2008). This measure moves away from how heavily concentrated the economy is with foreign partners, and instead focuses on 'the enforceability of contracts and the security of property rights' (Clague et al., 1999). Institutions are proxied by considering the amount of contract-intensive money in a state (Souva, Smith & Rowan, 2008: 387). Higher *CIM* indicates economic actors' confidence in the legal capacity of a state to honor contracts and enforce law. According to Dollar & Kraay (2003), *CIM* 'measures the extent to which property rights are sufficiently secure that individuals are willing to hold liquid assets via financial intermediaries'. It has also been used to evaluate the investment climate of a state, as higher values show investors are more confident the state has the legal capacity to honor contracts and enforce law (Clague et al., 1999; Fjelde & de Soysa, 2009; Souva, Smith & Rowan, 2008).

Investment profile is an index that measures the extent to which a country's investment climate is at risk of (1) contract viability/expropriation, (2) profit repatriation, and (3) payment delays. We obtain this index from the International Country Risk Guide (PRS Group, 2010). This index varies between 0 (very high investment risk) and 12 (very low investment risk). In previous research, this index has been used to assess the extent of political risks affecting FDI flows and the quality of domestic economic institutions that influence FDI and trade flows (Neumayer & Spess, 2005; Souva, Smith & Rowan, 2008). Coups d'état can undermine this investment climate, leading us to anticipate militaries will be less likely to intervene when the measure is higher (see Tusalem, 2010).

We use four indices that have been developed by the KOF Institute to capture different dynamics of globalization (Dreher, 2006). The KOF *Globalization* index accounts for transnational economic, social, and political ties. We also use the disaggregated measures for each component. KOF *Financial flows* is an index that considers trade as a proportion of GDP, foreign direct investment, portfolio investment, and payments to foreign nationals. The *Social globalization* index considers data on personal contact (e.g. outgoing calls, financial transfers, foreign population), information flows (e.g. telephone lines, internet users, newspaper circulation), and cultural proximity (e.g. number of McDonald's restaurants per capita). Finally, the *Political globalization* index considers embassies present in the country, membership in international organizations, and participation in UN Security Council missions. Though not directly associated with economics, the measure provides an alternative test of the importance of international ties.

We also consider two indicators at the suggestion of Mousseau (2012). *Contract intensive economy (CIE)* considers the presence of life insurance contracts. Though perhaps odd at first glance, the measure is theoretically appealing since these contracts 'cannot rely on personal forms of trust [and are instead] dependent on state enforcement' (Mousseau, 2015: 2). The measure was found to be robustly associated with civil conflict (Mousseau, 2012). We also utilize Mousseau's measure for *Private investment*. This measure evaluates the amount of private investment per capita, and considers the degree to which citizens are 'dependent upon the state's willingness and capacity to enforce contracts' (Mousseau, 2015: 3).

Moving beyond investments and perceptions of investment climate, we more directly account for formal international frameworks through two measures. First,

⁶ Additional specifications consider multiyear lags and controls for recent changes in the independent variable of interest. See Tables A10 and A7 in the Online appendix.

we look at the number of *Regional trade agreements* (RTAs) a country has concluded (World Trade Organization, 2015). Second, we consider how many *Bilateral investment treaties* (BITs) a country has signed and ratified (International Center for the Settlement of Investment Disputes (ICSID), 2015).

Control variables

We make a concerted effort to control for a number of potentially confounding factors. *Democracy* is a dichotomous indicator from Cheibub, Gandhi & Vreeland (2010).⁷ *Wealth* considers the natural log of a state's real GDP per capita in constant 2000 US dollars, while *Growth* considers percent year-to-year fluctuations, using updated data from Gleditsch (2002). We expect increases in both to be associated with less coup activity. *Oil rents* refers to the natural log of oil revenues per capita, and is expected to carry a positive sign (Ross, 2012).

Civil conflict is a dichotomous measure from the Armed Conflict Dataset (ACD) (Pettersson & Wallenstein, 2015). Specifically, we use the incidence variable that accounts for the presence of a new or ongoing civil conflict that results in at least 25 deaths per year. The measure from ACD also includes 'bloody' coups that reached a sufficient body count. We avoid conflating these conflicts with the dependent variable by recoding them as 0, following the lead of other recent efforts (Bell & Koga, forthcoming; Hultquist, 2013; Thyne, forthcoming).

Military expenditures as a proportion of GDP relies on data from the Correlates of War's National Material Capabilities dataset (Singer, 1987; Singer, Bremer & Stuckey, 1972). Updates utilize personnel data from the World Bank's *World Development Indicators* (World Bank, 2014) and military expenditure data from the Stockholm International Peace Research Institute (SIPRI, 2014).

We consider leaders' strategic use of political appointments as a survival strategy. Increasingly the standard in authoritarian political institutions, the work of Svoblik (2009, 2012; Boix & Svoblik, 2013) has shown how autocrats utilize legislatures in order to lengthen their tenure via power-sharing. Previous work has captured this dynamic by looking at the presence of the legislature.

Our sample includes authoritarian and democratic regimes, the latter of which will be perfectly collinear with the presence of a legislature. We consequently utilize the size of the *Cabinet* as a proxy for power-sharing. An excellent assessment by Arriola (2009) has shown cabinet positions to be an important influence on executive tenure in Africa. We similarly anticipate that states with larger cabinets will experience fewer coups.⁸

Finally, we address temporal dependence by including the *Years* since the last coup attempt. The squared and cubed polynomials for time are also included at the suggestion of Carter & Signorino (2010).

The model and results

We use a logistic regression model due to the binary nature of the dependent variable. Standard errors are clustered by country in an effort to address heteroskedasticity.⁹ The results are seen in Table I. The first row of the table reports coefficients for our variables of interest, with each column representing a different economic openness proxy for testing our hypothesis (*Financial deterrence*). The row reveals a striking trend: 11 of our 12 openness measures are significant at the .05 level (two-tailed). It is perhaps revealing that the sole exception, the KOF index for political globalization, does not actually account for economic traits. We will return to this point below.

The substantive influences of the economic interdependence variables are illustrated in Figure 1. The graph considers changes in the predicted probability of a coup when moving from low (10th percentile) to high (90th percentile) levels of each measure while holding the controls at their median values. The precise probability of a coup attempt will vary from model to model as a result of changes in the sample, but the Powell & Thyne (2011)

⁷ We also consider alternative democracy classifications from Boix, Miller & Rosato (2013), Geddes, Wright & Frantz (2014), and the Polity IV project (Marshall & Jaggers, 2003), and years of democratic rule. These can be found in the Online appendix (Tables A11–A14).

⁸ The Database of Political Indicators (Beck et al., 2012) describes the number of legislative seats, which is found to play a similar role (Beck et al., 2012: Table A9). Increases in both measures are strongly associated with reduced coup activity. We report the results for cabinet size over legislature due to both practical (the former's greater geographic and temporal scope) and theoretical (the executive controls cabinet appointments) reasons.

⁹ We took exhaustive steps to ensure our results are not sensitive to peculiarities of model specification. The Online appendix reports additional models that provide corrections for rare events (King & Zeng, 2001: Appendix Table A2), country-level fixed effects (A3), random effects (A4), jackknife (A5), and bootstrap (A7) simulations of the standard errors, a control for recent changes in the independent variable (A7), alternative control variables (A8), and alternative measures for democracy (A11–A14), power-sharing (A9), and oil revenues (A15).

Table I. The effect of economic interdependence on coup occurrence, 1952–2007

	Openness	FDI	CIM	CIE	Invest	KOF	Financial	Social	Political	RTAs	BITs	Climate
Interdependence	–0.007* (0.003)	–0.052* (0.024)	–1.213* (0.474)	–0.283* (0.132)	–0.366* (0.161)	–0.025** (0.010)	–0.009* (0.004)	–0.030*** (0.008)	0.006 (0.005)	–0.266** (0.094)	–0.053* (0.021)	–0.132* (0.067)
GDPpc	–0.374*** (0.088)	–0.462*** (0.103)	–0.328*** (0.093)	–0.216* (0.108)	–0.152 (0.123)	–0.181 (0.123)	–0.316*** (0.095)	–0.111 (0.119)	–0.411*** (0.096)	–0.381*** (0.109)	–0.410*** (0.091)	–0.201 (0.148)
Growth rate	–1.056 (0.796)	–0.418 (0.802)	–1.078 (0.693)	–1.372* (0.678)	–1.047 (0.649)	–1.543* (0.642)	–1.482* (0.671)	–1.703** (0.655)	–1.557* (0.655)	–1.424† (0.837)	–1.183† (0.661)	–2.634** (0.889)
Democracy	0.107 (0.173)	–0.217 (0.205)	–0.004 (0.180)	0.174 (0.166)	0.048 (0.176)	–0.004 (0.202)	–0.171 (0.195)	–0.017 (0.190)	–0.226 (0.206)	0.024 (0.207)	0.268 (0.172)	–0.245 (0.317)
Oil revenues	0.213† (0.123)	0.039 (0.167)	0.201† (0.105)	0.167 (0.142)	0.361* (0.142)	0.011 (0.120)	0.043 (0.126)	–0.011 (0.119)	0.073 (0.113)	0.150 (0.155)	0.235* (0.119)	0.105 (0.174)
Civil conflict	0.306† (0.171)	0.563** (0.194)	0.376* (0.178)	0.335* (0.146)	0.271† (0.148)	0.435* (0.172)	0.480** (0.179)	0.367* (0.174)	0.526** (0.161)	0.487** (0.188)	0.394* (0.162)	0.545* (0.251)
Mil. exp./GDP	–0.017* (0.008)	–0.023† (0.012)	–0.016* (0.007)	–0.006 (0.008)	–0.005 (0.007)	–0.004 (0.007)	–0.005 (0.008)	–0.003 (0.006)	–0.006 (0.008)	–0.016† (0.008)	–0.020* (0.008)	–0.004 (0.006)
Cabinet size	–0.017 (0.011)	–0.042*** (0.056)	–0.026* (0.010)	–0.028* (0.012)	–0.032** (0.012)	–0.031** (0.011)	–0.030** (0.011)	–0.038*** (0.011)	–0.036** (0.011)	–0.032** (0.011)	–0.016 (0.011)	–0.034† (0.020)
Time since coup	–0.240*** (0.046)	–0.205*** (0.056)	–0.256*** (0.040)	–0.283*** (0.045)	–0.294*** (0.044)	–0.189*** (0.050)	–0.199*** (0.053)	–0.184*** (0.048)	–0.191*** (0.049)	–0.254*** (0.061)	–0.243*** (0.044)	–0.158* (0.073)
Constant	1.898** (0.684)	2.695** (0.829)	2.173*** (0.657)	1.133 (0.719)	0.401 (0.847)	0.914 (0.834)	1.467† (0.769)	0.400 (0.845)	1.642* (0.749)	2.214** (0.856)	1.813** (0.688)	0.745 (1.204)
Observations	4,930	3,820	5,174	5,099	5,519	4,487	4,332	4,487	4,520	3,735	5,627	2,557
Countries	144	135	134	134	134	139	134	139	140	137	139	123
Years	1961–2007	1971–2007	1952–2007	1961–2007	1952–2007	1971–2007	1971–2007	1971–2007	1971–2007	1959–2007	1960–2007	1985–2007
Coup attempts	237	156	281	245	281	191	187	191	191	155	266	72
Log-likelihood	–811.76	–546.42	–932.2	–840.87	–948.61	–680.71	–661.27	–678.56	–683.78	–542.66	–915	–275.47
Wald χ^2	229.97***	178.29***	183.88***	213.94***	191.11***	226.05***	178.82***	189.98***	187.35***	158.51***	188.33***	117.42***
ROC	0.80	0.82	0.80	0.80	0.80	0.80	0.80	0.80	0.79	0.81	0.80	0.82

*** $p < .001$, ** $p < .01$, * $p < .05$, † $p < .10$ (two-tailed). The table reports logit coefficients with standard errors (clustered by country) in parentheses. Additional specifications utilizing fixed and random effects, as well as alternative treatments of the control variables, are available in the Online appendix.

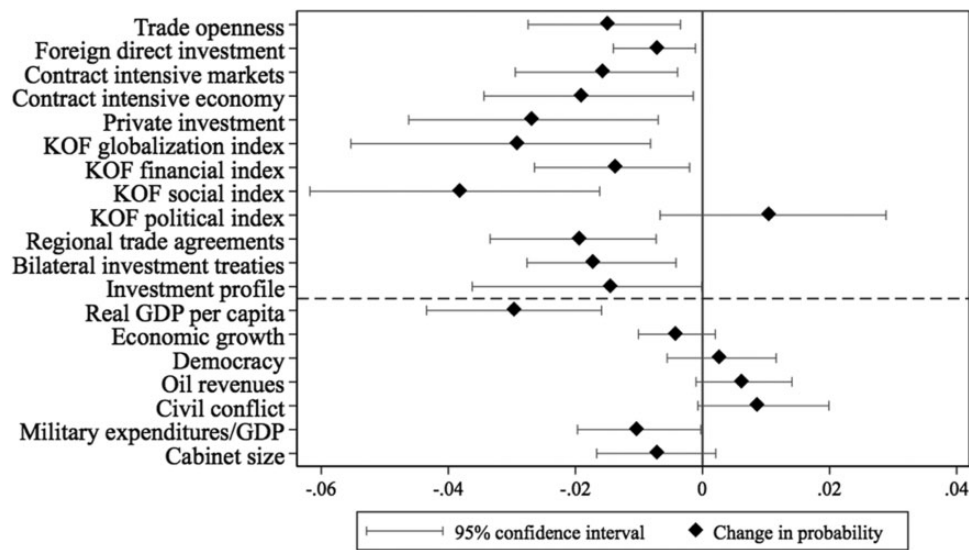


Figure 1. Summary of substantive effects

The figure reports estimated changes in predicted probability when increasing the independent variable from the 10th to the 90th percentile. Discrete variables (*Democracy* and *Civil conflict*) reflect changes from 0 to 1. The diamond illustrates the estimated difference in probability while the whiskers reflect a 95% confidence interval (two-tailed). Control variables are estimated from the first model (trade openness). The figure was constructed using CLARIFY (Tomz, Wittenberg & King, 2003) and plotfids (Boehmke, 2008).

coup dataset reports that coups afflict country-years at a rate of .041. They are, indeed, fairly rare events, an important distinction when considering substantive influences. For example, moving from the 10th to 90th percentile in trade openness ‘only’ reduces the probability of a coup attempt by around .015, but this actually represents a 45% decline (.033 to .018). This is similar to shifts in contract intensive markets (–41%), investment profile (–54%), and the KOF financial flows index (–39%). Increased *FDI* has a more modest 23% reduction when moving across the same threshold. The other financial measures, however, displayed a stronger influence. Changes in Mousseau’s (2012, 2015) contract intensive economy measure led to a 66% reduction in coup activity, while heightened private investment reduced it by 78%. Formal international frameworks (BITs and RTAs) also had a pronounced substantive influence, with shifts from the 10th to 90th percentile in each measure leading to a probability reduction of around 64%.

Interestingly, while the KOF globalization index revealed a 70% reduction, this is being primarily driven by its social component (–81%). The measure does include economic dynamics such as remittance transfers. However, the strength of the finding, compared to the more modest influence of KOF’s other indices, suggests that cross-national social connections could be an understudied aspect of coups. The political index, however,

was insignificant. Two scenarios potentially explain this. First, it could be the case that interdependence matters insofar as it is accompanied by a financial stake. Second, recent scholarship has suggested that participation in one of the elements of the measure – United Nations missions – is likely to lead to military grievances that prompt future mutinies (Dwyer, 2015).

Several of our controls also yield interesting results. GDP per capita was significant in eight of the 12 models, supporting prior explanations that coups become less likely as states become wealthier. Coups are reduced by 68% (.045 to .014) when moving from the 10th to 90th percentile. With the exception of prior coup history, which is widely regarded as the best predictor of coup activity, GDP per capita was the only control variable whose substantive significance was comparable to most of the other economic indicators.

Economic growth rate was significant at the .05 level for seven of 12 models. Economic growth had its most pronounced influence in the KOF social index model, and even there a shift in the percentile led to a more modest drop in the dependent variable than seen with the economic openness measures (a 25% decline) in the dependent variable. Increasing oil revenues were most strongly associated with coup activity in the private investment model, where we see an increase of around 43%. Again, this influence should be met with some reservation, since it is the highest of the 12 models and,

being significant at the .05 level in only two models, the measure was not robust. Military expenditure as a proportion of GDP was similarly inconsistent (significant in four of 12 models). Cabinet size was significant with the expected negative sign in nine of 12 models, and led to a 26% reduction in coup activity in the FDI model.¹⁰ Our measure for democracy was insignificant in each specification. Though recent scholarship has suggested democratization is associated with fewer coups (e.g. Lindberg & Clark, 2008; Posner & Young, 2007), democracies are increasingly found to be no less susceptible than autocracies when controlling for other factors (e.g. Bell & Koga, forthcoming; Thyne, 2010).

We also move beyond testing individual variables by considering the overall fit of the model. Table I reports a receiver operating characteristic (ROC) statistic, long common to the medical sciences (Hanley & McNeil, 1982). This reports a plotted function of the rate of true positives versus false positives when predicting the dependent variable. The number reports the area 'under' the ROC curve, where 0.0 represents no correct predictions, 1.0 represents perfection, and .50 effectively represents random guessing. The area under the curve varies between .80 and .82, with the exception of the model assessing the KOF political index (.79). Values at and above .80 are generally regarded as 'good'.

Clarifying the causal mechanisms: The 2000 coup attempt in Ecuador

The case of the attempted coup in Ecuador in 2000 helps to clarify our theory's causal mechanisms and provides additional support for the effect international economic factors have on coups. To be clear, our theoretical expectation is that higher levels of interdependence will make coups less likely to be attempted. It is, of course, difficult to illustrate these dynamics in non-events, though the aforementioned case of 1996 Paraguay does act as a notable exception. Just three years removed from Paraguay's Wasmosy-Oviedo feud, Ecuador found itself mired in its worst economic crisis in a century in the second half of 1999 (Barracca, 2007). With over 70% of the population already below the poverty line the economic crisis was especially challenging. By January 2000

the government was forced to cut the military budget by 60% and President Mahuad's approval rating had plummeted to a meager 6% only 15 months after seeing a rating of 60% (Barracca, 2007). He proved unable to address the crisis, the military had seen its corporate interests take a huge hit, and Ecuador had a strong legacy of prior coups. It was then perhaps unsurprising when a faction of the armed forces led by Colonel Lucio Guitierrez stepped in and removed Mahuad. President Mahuad predictably condemned the effort, likening the act to the movies of renowned Mexican comedic actor Cantinflas and claiming the maneuver exposed Ecuador to 'international ridicule' (Rohter, 2000a). International actors immediately and unequivocally condemned the move, with the United States threatening sanctions 'akin to Cuba's' (Rohter, 2000a).

Elements of the military high command, citing the desire to 'prevent the international isolation of Ecuador', would not endorse the coup. Army head General Carlos Mendoza ended any talk of a military junta and the army retreated away from politics (Rohter, 2000b). Vice President Gustavo Noboa, who had the unenviable task of trying to stabilize the tumultuous political and economic environment, ultimately succeeded Mahuad. Noboa made immediate efforts to reassure the international community, downplaying the abortive coup as 'buffoonery', preaching 'confidence and credibility', and pleading 'for patience and understanding from foreigners and the Ecuadorian people' (Rohter, 2000b).

It is revealing that the military high command, despite how bad the domestic economic situation had become, were cognizant of what a coup would mean for Ecuador's future solvency. The military high command decided against seizing power in favor of proceeding along constitutional lines. The Ecuador case also illustrates care taken to avoid increasing tensions with the military. A major post-coup concern raised by scholars is that political and economic circumstances can be worsened when governments pursue strong reprisals in the shadow of abortive coups (Fosu, 2002). The Noboa administration trod carefully. Colonel Guitierrez was arrested in the immediate aftermath of his coup attempt but was quickly released, soon promoted to the rank of general, and even elected to the presidency three years later.

Scholarly efforts to systematically address such cases would previously tend to focus on the role of the economic crisis itself, specifically in regard to declining GDP per capita or Mahuad's cuts to the military budget. There is a paucity of efforts that attempt to show the influence of international economics more generally (aside from international responses) or to empirically

¹⁰ Replacing *Cabinet size* with the number of legislative seats, reported in Table A9 of the Online appendix, *Parliamentary seats* is negative and significant in 11 of 12 models. Both of these measures provide strong support for the argument that leaders can use cabinet seats and legislatures for the purposes of patronage and power-sharing, each of which are important contributors to political survival (Arriola, 2009; Boix & Svolik, 2013; Svolik, 2012).

show how coup-plotters may respond to the realities of economic interdependence prior to any coup attempt. In other words, the motive to attempt a coup may be strong in many cases, but the reality of market dynamics and increased interdependence has led would-be plotters to accept that coups are far less attractive endeavors and events such as those witnessed in Ecuador are proving the exception rather than the rule.

Conclusion

Studies have offered a variety of explanations for the decline of coups. This article hypothesized that increased economic openness and stable market economies would decrease a state's coup likelihood through two mechanisms. First, we build on the capitalist peace literature by hypothesizing that domestic actors will avoid undermining the state's economic or legal frameworks. Prior scholarship has spoken of this tendency to be true for more destructive activities, such as civil war (e.g. Magee & Massoud, 2011). Second, we expect that increased economic openness will incentivize international actors to take pre-emptive measures against unconstitutional changes of power. The preceding analysis demonstrated that states whose economies are more heavily tied to the international community, and those that more generally have attractive markets, are indeed significantly less likely to see a coup attempted. In short, potential coup-plotters are more likely to rely on peaceful and legal methods to address their grievances.

The findings ultimately contribute to three bodies of literature. First and most obviously, we extend the applicability of the capitalist peace thesis. Prior studies have shown how economic interdependence can reduce the likelihood of interstate and intrastate conflicts. Prior theories have largely considered the vast destruction – in terms of lives and infrastructure – that potential belligerents wish to avoid. We extend this to demonstrate that the capitalist peace is applicable to a form of conflict that is far less destructive in terms of infrastructure and lives and is instead more costly for a state's long-term economic stability. Second, we contribute to a growing body of empirical work that seeks to explain military coups d'état. Economics have been an often-mentioned determinant of coup activity, but studies have disproportionately considered simplistic domestic measures such as GDP per capita and growth rates. This article thus fills a remaining void in what is a quickly expanding body of literature. Finally, different elements of the article more generally speak to literature on political survival. Our theoretical emphasis on economic interdependence and the control

variables identify several measures political elites can undertake to ensure their survival – for example, our finding that increases in the size of cabinets and legislatures reduce the likelihood of coup occurrence contributes to literature on both coup-proofing and elite power-sharing.

Our argument and findings point to potential research avenues on the effects of economic interdependence on domestic politics. First, our argument suggests that international economic ties can influence the democratization processes of post-coup regimes. Because economic actors, domestic and international, prefer a stable and predictable economic policy environment, we might expect new coup-born governments to pursue and enhance strategies meant to ensure stability and the rule of law such as ensuring transition into civilian democratic rule. Second, international economic ties can reduce the likelihood of democracy slippage in states that previously experienced coups given the potential economic losses of sliding from a democratic regime. These ties not only facilitate growth that reduces grievances from potential regime threats, but may also facilitate foreign economic partners to use means to discourage reversals in the rule of law in the threatened state.

Replication data

The Online appendix, dataset, and do-file for the empirical analyses in this article are available at <http://www.prio.org/jpr/datasets>.

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JONATHAN M POWELL, b. 1982, PhD in Political Science (University of Kentucky, 2013); Assistant Professor, Department of Political Science, University of Central Florida (2014–); recent publications have appeared in *Journal of Conflict Resolution* and *African Security Review*.

MWITA CHACHA, b. 1982, PhD in Political Science (University of Georgia, 2011); Assistant Professor, Department of Political Science and International Relations, Nazarbayev University (2012–); recent publications have appeared in *Journal of Peace Research* and *African Security*.