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Is the hidden hand an iron fist? Capitalism and civil peace, 1970–2005

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Abstract
There is surprisingly little empirical scholarship on the spread of capitalistic economic policies under the rubric of ‘globalization’ and domestic peace. While the classical liberals saw free markets leading to social harmony because of self-interest of individuals, who cooperate for profit, Marxists and others viewed markets as anarchical, requiring state intervention for obtaining justice and peace. The authors argue from an opportunity-cost perspective that the payoffs to rebellion are structured by how an economy is governed. Closed economies are likelier than more open ones to accumulate ‘rebellion specific capital’ because of high payoffs to organization in the shadows. Using an index of economic freedom that measures how free people are to transact in an economy, the authors find that countries more favorable to free enterprise have a reduced risk of civil war onsets, a result that is robust to the inclusion of institutional quality, per capita wealth, and sundry controls. The results hold up despite a battery of specification changes, alternative data, and testing methods. The findings do not suggest that states under conditions of capitalism lose their autonomy to provide the public good of peace, as skeptics of globalization claim. Peacemakers will do well to build institutions that reward productive investment over rent-seeking, alongside democratic institutions that ultimately gain their legitimacy on the back of good economic performance and well-functioning markets.

Keywords
capitalism, civil conflict, civil war, economic freedom, globalization

Introduction
There is a long, contentious debate about whether capitalism delivers social justice and peace (Hayek, 1944; Lenin, 1916; Polanyi, 1944; Schumpeter, 1942; Smith, 1776). The current debate on the effects of globalization is in many ways a continuation of this debate, which until recently has been contested between those who argue that interdependence between rich and poor countries can spread modernization, including liberal, capitalistic values, and economic and political development, and those who see global capitalism as breeding dependence of the poor on the rich, leading to exploitation and sociopolitical disarray (Apter, 2008; Boswell & Dixon, 1990; Hall, 1987; Schneider, Barbieri & Gleditsch, 2003; Stilwell, 2006; UNRISD, 1995; Weede, 2004). Research in international relations finds considerable support for peace between states that are characterized as ‘liberal’, or even capitalistic, but very little is known about capitalism’s effect on conflict within countries. In this era of global governance, we need sound theoretical and empirical investigation into what types of economic systems matter for achieving peace and prosperity, in order to inform policy. Journalistic accounts of the ravages of capitalism, for example, have recently attracted much attention, particularly on the heels of well-publicized corporate scandals and financial meltdowns (Klein, 2007).

Current arguments about globalization suggest that global capitalism driven by the profit motive allows capitalists the upper hand over communitarian interests, which could lead to weakened state autonomy and ‘societal disarray’ (Rodrik, 1997; Saunders, 1995; Stiglitz, 2002; UNRISD, 1995). Using
the globalization debate as a backdrop, this article empirically assesses whether states that exhibit capitalistic tendencies reflected by their economic policies are more likely to have serious domestic quarrels relative to those that do not.² If states have onsets of civil war, then by definition, a state is unable to monopolize the use of force. We use empirical data on economic freedom in multivariate models of civil war, comparing the effects of capitalism with other interesting, policy-relevant factors, such as ‘good governance’ and political democracy.

Our results are easily summarized. Using data on economic freedom from 1970–2005, we find that the higher the level of economic freedom, the lower the risk of civil war. These results are robust to several different specifications of the models and sample size. The substantive impact of economic freedom is quite large, relative to other significant factors. Including terms for good governance and institutional strength makes no difference to the basic results, and economic freedom matters more than either democracy or good governance. Our results show rather clearly that capitalistic economic policies do not undermine a state’s autonomy to maintain social peace, as many have suggested (Mousseau & Mousseau, 2008; Weede, 2004). If a hallmark of globalization is the spread of capitalistic economic policies across the globe, then there seems little to suggest that social conflict would necessarily accompany it.

Capitalism and its critics

Classical liberals, such as Adam Smith, David Ricardo, and Bernard Mandeville, argued that individuals in pursuit of self-interested goals serve a higher social purpose ‘as if by a hidden hand’ (Stilwell, 2006). They argue that free markets achieve prosperity and spontaneous social cooperation because of the self-interest of individuals, rather than appeals to morality. Such arguments were expanded by political philosophers, such as Immanuel Kant, John Stuart Mill, and Norman Angell, who viewed the expansion of trade, or the ‘commercial spirit’, as the triumph of exchange and civility over plunder and predation. Commerce apparently made war unnecessary. Self-interested individuals cooperated out of a profit motive, which supplant ed parochial corporate affiliations, such as ethnicity and religion, raising the value of individual rights. Classical liberals argued that harmony stems fundamentally from expected gains from cooperation rather than from religious ethics or some inherent feelings of sympathy for fellow beings preached from pulpits. In its very essence, the argument claimed that the superiority of capitalism over the dominant economic system of the time, mercantilism, was due to the ability of markets to create and distribute goods and services (wealth) more efficiently, serving a social good. For markets to work efficiently, however, there had to be a system of good property rights. Capitalism is marked by the means of production being owned by and secured for individuals and by its expansionary tendency, since the desire for profit drives investment, which in turn benefits society by breaking down parochial ascriptive ties. As markets expand, spheres of peace and prosperity also expand. A social-welfare maximizing ruler, thus, would be one who interfered least in the workings of markets. At a minimum, the state should provide public works that enhance the operation of and the expansion of markets (Stilwell, 2006).

For critics of capitalism, such as Marxists and other proponents of critical theory, capitalism is too anarchical. It is an economic system in which capital exploits labor (Saunders, 1995). The owners of capital live off of their exploitation of labor, and the nature of the production and reproduction of capitalism creates distinct classes where capital becomes concentrated among a few. These classes will ultimately compete (even clash) over the redistribution of the social surplus. Such explanations of conflict have a long pedigree that views European revolutions as the desire of the poor to emancipate themselves from the shackles of despotism and bourgeois exploitation (Przeworski, 1990). The Cold War was seen as the logic of class-struggle on a worldwide scale. Conflicts in the developing world after decolonization came to be seen as a global extension of class conflict. Thus, a large amount of scholarship was devoted to identifying if and how inequality, both income and land inequality, related to civil violence (Bowles & Dixon, 1990; Muller & Seligson, 1987; Russett, 1964; Saunders, 1995).

The literature on conflict and income inequality is highly mixed and theoretically somewhat ambiguous (Lichbach, 1989; Weede, 1998). Since the poor face massive collective action problems, they may starve in silence. If the capitalists control state power, as Marxists claim they do, then state repression may prevent large-scale civil violence. In fact, many recent methodologically sophisticated empirical studies find no relationship between various measures of income inequality and civil war (Collier, Hoeffler & Rohner, 2009; Fearon & Laitin, 2003). In fact, Przeworski & Wallerstein’s (1988) seminal article on the question of why the poor don’t ‘soak’ the rich as often as we would expect, shows clearly that even if the poor would be better off in the long run, the ‘valley of transition’ when the rich withdraw their ‘investment’ would dissuade such action. In other words, there could be an equilibrium of class compromise, not class war, leading to democracy and some redistribution without outright expropriation (Przeworski & Wallerstein, 1988). This literature demolished Marxist arguments about how democracy and redistribution would never be allowed by a state acting in the interests of capital (Iversen, 2008).

² We use one of the most widely cited measures of ‘economic freedom’ that captures how favorable a state is towards promoting capitalistic development along 22 economic and institutional dimensions making up 38 different components aggregated into an index (Gwartney & Lawson, 2005). Many others use this index to measure the extent of ‘neoliberalism’ reflected in an economy as well as how friendly a state is towards entrepreneurship and private enterprise – in other words, more capitalistic policies (Boockmann & Dreher, 2005; de Haan & Sturm, 2009; Easterly, 2005).
Notice that much of this literature is focused on industrial countries where developed class interests and distinctive class consciousness exists, something that might be absent in much of the developing world. Rather than using measures of inequality, which was always a proxy for arguments about capitalism versus socialism, we utilize a measure of ‘capitalist’ economic policies directly in models of conflict. This method allows us to answer the question of capitalistic economic policies and social peace head on, relative to the many studies that have addressed the issue indirectly by focusing on material conditions that ostensibly proxy class consciousness, namely the degree of inequality. Even Marx, after all, understood that non-industrial societies are unprepared for revolution because of the lack of class consciousness. Today’s civil wars take place largely in areas where class consciousness is conspicuously absent.

Capitalism and state capacity: The globalization debates

The issue of capitalism and state autonomy has resurfaced in debates on globalization. Apparently, globalization and the liberalization of economic policy can weaken the functions of the state, particularly its authority to collect taxes (Tanzi, 1999). State capacity is seen by many as central to understanding why some countries experience political violence while others do not (Fearon & Laitin, 2003; Fjelde & de Soysa, 2009; Huntington, 1968). Pessimists on globalization see the growing empowerment of markets and global corporations as coterminous with the weakening of states – the so-called ‘race to the bottom’ thesis. States will lower social standards to placate ‘footloose’ capital. Top-down globalization led by the International Monetary Fund (IMF) and the World Bank will further weaken state capacity to deal with dissent, leading to violence (Abouharb & Cinigranelli, 2007; Ranis, Vreeland & Kosack, 2006). By definition, states must maintain the monopoly on violence if they are to maintain legitimacy and order. Simple regime types, such as democracy versus autocracy, are poor predictors of civil wars and violent political dissent and repression (Bueno de Mesquita et al., 2005; Davenport & Armstrong, 2004; Hegre et al., 2001). This issue suggests that simply identifying a politically ‘good’ state as one that is democratic does not automatically translate into peaceful state–society relations, because groups with some payoff for organizing violence against the state can always hedge their bets against being eliminated when facing a relatively weak state. According to some, the existence of civil wars in poor countries is analogous to the existence of ‘crime’ in richer states that are more capable of keeping criminal gangs from growing into rebel armies (Collier, 2000).

Despite a strong consensus around state capacity and peace, there remains disagreement about what state capacity actually is and how to measure it. A recent analysis shows that a variable measuring the quality of institutions that govern economic activity, namely, a measure of ‘contract intensive money’, predicts peace to a larger degree than does a measure of the ‘extractive capacity’ of states (Fjelde & de Soysa, 2009). They also find that governments that command a higher share of an economy (assumed to be a government’s ‘purchasing power’ of peace) also face a lower risk of civil war. At first glance, this result might support the view that heavy government involvement in an economy may moderate the harmful social effects of capitalistic society – the ‘compensation’ argument (Rodrik, 1997). However, what high government spending in capitalistic (more open) economies actually achieves is heavily contested (Garrett, 1998). If Garrett’s ‘competition’ thesis is correct, then high government spending simply perpetuates more competitive capitalism, not social insurance, thereby perpetuating peace, an answer that will sit very badly with capitalism’s critics. We address this issue by offering a simple model based on what we already know empirically about determinants of civil war, particularly the feasibility thesis of civil war. We also test the model in a more straightforward manner – could economic systems that are more capitalistic manage social peace?

A capitalist civil peace: An opportunity-cost model

The ‘capitalist peace’ argument on interstate war is based on a simple logic – the capitalist structure of production raises the cost of theft, making exchange preferable. Capital and knowledge required for successful production in modern economies is easily withdrawn from conquerors – the essence of Przeworski & Wallerstein’s (1988) critique of Marxist ideas about states and internal redistribution discussed above. In fact, the argument is valid for both the domestic and international setting. As Gartzke (2009: 37) writes, ‘politics has simply ceased to be a feasible mechanism for the production or acquisition of wealth. Because of this, and because modern productive processes are more dependent than ever on the provision of public goods, politics is much less cut-throat (literally) than it used to be, both within and between international borders’ [our italics]. Such arguments, however, are far too imprecise to be applicable in the domestic setting. On one hand, as many observe, the threat to property because of politics is ever present in poor countries where the median voter’s income is below mean income. But even more seriously, the location of civil violence today is mostly, if not wholly, in countries with less than ‘modern’ economies. In other words, when it comes to civil violence, the benefit of sophisticated production structures for inducing peace is far less obvious. We explore below how the basic insight of why more capitalistic economies might raise the premium on peace is still valid in the developing-country context – i.e. why economies favorable to entrepreneurship can matter net of the level of economic sophistication.

The theoretical and empirical analyses of civil war conducted by Collier & Hoeffler (2004) and by Fearon & Laitin (2003) find that opportunity factors explain the onset of conflict, as opposed to factors that typically generate large
grievances. These authors conclude that civil violence may be a function of 'fortune-seeking' behavior as opposed to 'justice-seeking', largely because of the immense collective action problems surrounding the provision of public goods, such as justice (Collier, 2000; Collier & Hoefller, 2004). Conflicts will occur where it is 'viable' for groups to organize (Collier, Hoefller & Rohnen, 2009). If this is true, then opportunistic behavior for organizing violence against states must be shaped by many factors, including the sociopolitical and economic environments that shape the size and nature of the payoffs for investing in violence over other 'profitable' enterprises.

The 'loot-seeking' model of rebellion suggests that what makes conflict attractive and viable at the same time is the expected payoff to the investment in rebellion. Such arguments, however, rarely consider the opportunity costs associated with alternative investments – any potential rebel could easily be a natural resource-exporting 'corporation', paying taxes to the state as much as a warlord who has to invest much of the loot (not to mention the discomfort of living in the bush) for fighting the state and other potential predators. However, if the state is characterized as one that monopolizes all economic activity and expropriates the surpluses that are created in an economy – i.e. Mancur Olson’s ‘roving’ rather than ‘stationary’ bandit – then there will be few incentives to invest in taxable enterprise (Olson, 1993). In other words, there will be large ‘deadweight losses’, since the tax rate is not optimal, nor property rights secure. Such an environment poses risks for productive enterprise. Warlord politics, in other words, is ‘competition’ among ‘roving’ bandits. Where property rights are insecure and capricious political processes govern economic life, there is motivation for organizing in the shadows around capturing rents and defending them (Skaperdas, 2003).

In other words, when economies are characterized as having distorted markets and high tax rates, they suffer ‘deadweight losses’, production falls but demand for goods remains constant, which allows super profits for smuggled goods – entrepreneurship is forced into the shadows. These groups over time will possess a particular form of conflict-specific capital, such as access to armaments, tunnels, finance, and shadow networks that give them advantages over state forces. Simultaneously, such areas see the intrusion of state forces that can exacerbate the level of violence. In weak state environments, thus, such violence resembles civil war. Such violent environments dominated by shadowy groups apparently now make up a large part of the violence globally (Ballentine & Sherman, 2003; King, 2001; Mueller, 2004; Pugh & Cooper, 2004). We agree with Skaperdas (2003) that the economy cannot be divorced from its governance, since the restraints on particular forms of behavior of homo economicus is shaped by the incentives that govern the markets.

There may of course be other structural factors and processes that also make heavy state involvement in the economy more risky. First, governments that dominate economic life monopolize social space and stifle social capital, practicing what some people call ‘precocious Keynesianism’ that promises more salvation than it delivers, leading to social dissent and state failure as we saw in the former Soviet Union (Waldner, 1999). Further, if states monopolize economic life, then this raises the premium on capturing the state, much like the arguments that explain conflict through the ‘natural resource curse’ (Ross, 1999, 2004). If the state is the ‘only game in town’ then rational actors will invest in predation over production (rent-seeking) and the capture of state power. Similarly, natural resource wealth, particularly oil wealth, leads to interventionist states, or production-unfriendly environments, leading to weak states that also alter the payoff for capturing state power. The puzzle is, however, if resources provide lootable income and governments are weak under resource-wealthy conditions, then why have rulers not used the resource wealth to build up more viable states and maintain more stability? For us, the most convincing arguments are that rulers fear replacement and thereby do not build institutions that would lead to the development of alternative bases of power (Acemoglu & Robinson, 2006). If capitalism builds alternative sources of economic power in a society, then resource wealthy rulers have little incentive to open economies that would lead to a modern economy and form the basis for reform (Fors & Olsson, 2007). There is by now a large body of literature on the ‘rentier state’ that is based on similar arguments explaining why democracy and market-friendly policies do not easily come about in resource-wealthy states (Bellin, 2004; de Soysa & Binningsbø, 2009; Ross, 2001; Weinthal & Luong, 2006).

One may have already noticed that what makes capitalism provide the goods are good institutions that are capable of upholding the rule of law and protecting property. This may by definition require a strong state, but not necessarily one that intervenes in the economy. The issue then is whether capitalism and peace go together because of good institutions that pacify people and allow a state to coerce them easily, and not necessarily because of any inherent pacific benefits from free enterprise and the commercial spirit, as some classical liberals argue. In order to estimate the net effects of both, we parse out the effects of good institutions from our measure of economic freedom by controlling explicitly for them in the models.

Data and design

Independent variable: Measuring economic freedom

Assessing the relationship between globalization and social outcomes is now a growth industry (Dreher, Gaston & Martens, 2008). Few, however, have empirically addressed the issue of diffusion of capitalist economic policies and social outcomes, such as civil peace. Most studies proxy globalization with measures of trade dependence, or openness to foreign investment. The results of the effects of trade or FDI on conflict are mixed. Hegre, Gissinger & Gleditsch (2003) find no direct effect of trade/GDP on the risk of conflict, nor do they

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Footnote:

3 For a comparative view of warlordism, see Marten (2006).
detect a significant effect of FDI/GDP. They do, however, find evidence suggestive of an indirect negative effect of trade on internal conflict, working through economic growth. Eldabawi & Hegre (2008) corroborate this indirect effect of openness, working via economic growth. Owing to several factors, trade volume and FDI are imperfect proxies for an economy’s overall structure of governance in terms of how friendly policies are towards capitalism and private investment—a country with high resource exports could be a high trader and an attractive site for FDI, but contain risk factors of conflict via the natural resource curse and bad economic governance.

Conversely, Bussmann & Schneider (2007) argue that states that pursue a policy of economic openness exploit their comparative advantage and produce and consume more, thus enhancing economic welfare and societal peace. By increasing the opportunity costs of rebellion, openness facilitates peace. They find that the level of trade openness, measured as the sum of exports and imports divided by GDP, is a significant predictor of civil peace. Also, the level of FDI flow influences peace positively. Bussmann & Schneider (2007) find, moreover, that changes in economic openness, measured as the yearly growth rate of the trade to GDP ratio, are associated with an increased risk of conflict, suggesting that the short-term redistributive effects of economic liberalization might precipitate civil unrest. In general, however, measures such as the trade to GDP ratio or FDI flows are problematic because they are outcome variables, not policy variables (Steinberg & Saideman, 2008). They might reflect a number of economic and geographic attributes of a country and not necessarily the policy process. To account for this, Bussmann & Schneider (2007) also add a measure of the regulatory aspect of economic integration, with data measuring capital control relaxation. Thus, the general results linking trade openness and FDI to civil peace are still quite mixed.

Steinberg & Saideman (2008) examine how the role of government intervention in the economy affects ethnic peace. They argue that high levels of government intervention precipitate civil war by increasing the fear among excluded ethnic groups. A majority ethnic group could hog the benefits of state power—ethnic nepotism—which will lead to redistributive outcomes adverse to groups without access to state power. They use a measure of government intervention in the economy from the Heritage Foundation and find that ‘economic freedom’ is associated with a lower risk of ethnic violence. In an additional test, they also use a more inclusive definition of conflict, relying on data from the UCDP/PRIO dataset (but an unconventional operationalization—in three steps—and only a cross-section of data (2001–04) for the main analysis). Others have addressed the question of market economies and political violence by assessing the influence of a contract-rich environment on political repression. They find that such ‘market norms’ lead to better human rights conditions (Mousseau & Mousseau, 2008). We contribute further by looking at the effects of economic freedom on the outbreak of conflict by using a more comprehensive dataset and testing a longer time frame. In other words, we explore further rather tentative evidence for a ‘capitalist civil peace’ by using the widely cited Index of Economic Freedom from the Fraser Institute (Gwartney & Lawson, 2005).6

The Fraser Institute defines economic freedom in the following manner:

The central elements of economic freedom are personal choice, freedom of exchange, and protection of private property. When economic freedom is present, individuals are free to make economic choices such as how to use their time and other resources, what goods to consume, and what business and investment alternatives to pursue. Of course, they will often find it advantageous to cooperate with others and markets will coordinate their choices and bring them into harmony. . . . Other things constant, freer economies will rely more on markets and less on government to answer these basic economic questions. (Gwartney & Lawson, 1997)

The Economic Freedom of the World Index (EFI) incorporates 38 components designed to capture the degree to which government policy and institutions facilitate voluntary exchange, protect property rights, enforce contracts, support open markets, and minimize government entry into labor, capital, and product markets (Gwartney & Lawson, 2005). These various aspects are, in turn, aggregated into one single index that ranges from 1 to 10. Higher numbers indicate more economic freedom. The index is available for over 120 countries and reported in five-year intervals from 1970 until 2000, after which annual values are reported. For our main analysis, we choose to linearly interpolate the data for the years in between the quintiles from 1970 until 2000. We also examine the robustness of the results using simple interpolation of the last observed value (i.e. ascribing the 1970 value of the EFI index to all years up until the next observation in 1975), as well

6 Previous studies have used this measure to test the effects of neoliberal policies on growth (de Haan & Sturm, 2009), the effects of IMF conditionality on policy change (Booekmann & Dreher, 2003; Dreher & Rupprecht, 2007), and the effects of economic freedom on corruption (Graeff & Mehlkopf, 2003), democracy (Feng, 2003), and subjective well-being and happiness (Veenhoven, 2000).

7 Data for the 38 components are used to derive ratings on five major areas: (1) the size of government, (2) legal structure and security of property rights, (3) access to sound money, (4) exchange with foreigners, and (5) regulation of economic activity (credit, labor, and business). A majority of the components are assessed based on objective data sources, but some also rely on perception-based rankings by country experts.

4 Eldabawi & Hegre (2008) find no significant effects of terms-of-trade shocks on the risk of conflict.

5 Bussmann, Schneider & Wiesehomeier (2005) test a similar argument on sub-Saharan African countries. Blanton & Apodaca (2007) conduct a similar test of the globalization argument, focusing only on developing countries.
as using only the five-year observations on the EFI index up until 2000 and coding the onset of armed conflict accordingly to match the five-year intervals. To ensure that our independent variable is measured prior to the onset of civil conflict, we lag the value of economic freedom by one year.

The onset of civil conflict

We rely on data from the UCDP/PRIO Armed Conflict Dataset v.4-2008 for constructing our dependent variable, the onset of civil conflict (Gleditsch et al. 2002; Harbom, Melander & Wallensteen, 2008). An intrastate armed conflict is defined as a contested incompatibility between a government and one or more opposition groups that results in at least 25 battle-deaths in a year. The onset of civil conflict is a dichotomous variable taking on the value of 1 in the year a conflict breaks out, and 0 otherwise. If the conflict intensity falls below the casualty threshold for two consecutive years, the next observation of the conflict is treated as a new onset. Since the UCDP/PRIO dataset allows for multiple onsets of armed conflict, country-years with ongoing conflict are kept in the dataset. The risk of a new onset is, however, likely to be influenced by an ongoing conflict in the country, particularly in small countries. We therefore add a control variable taking the value of 1 if there was an ongoing conflict in the previous year, and 0 otherwise.9

Control variables

We include several control variables that relate theoretically to our main variable of interest and are widely believed to be associated with the onset of civil conflict. Economic development is one of the most robust predictors of civil peace (c.f. Fearon & Laitin, 2003; Hegre & Sambanis, 2006). Since the level of economic freedom and the level of income and its growth rate are generally closely associated (de Haan & Sturm, 2009), we control for per capita income using data from the World Bank’s World Development Indicators (World Bank, 2007). The variable is log-transformed to reduce the effect of very large values. We also lag this variable by one year to address issues of reverse causality. On the basis of this variable we also construct a measure of the percentage growth rate of per capita income from year to year. This variable too is lagged by one year. Many find that the growth rate of income reduces the risk of conflict (Collier & Hoeffler, 2004; Miguel, Satyanath & Sergenti, 2004). Our third control is country size, which is the log of total population (World Bank, 2007). Large countries have a higher risk of civil conflict, and a country’s desire to be economically open and free might be a function of the size of its domestic market (Alesina, Spolaore & Wacziarg, 2000).

Country size and the degree of ethnic fractionalization are also connected. This is a crucial variable to include since many argue that highly fractionalized societies cannot overcome coordination problems for formulating good economic policies, and they may also contain a high degree of social conflict (Easterly & Levine, 1997; Easterly, Ritzen & Woolcock, 2006; Kimenyi, 1997). However, the empirical effect of social fractionalization on the risk of conflict is mixed and theoretically contested (Collier, Hoyeffer & Rohner, 2009; Esteban & Ray, 2008; Fearon & Laitin, 2003). We enter a measure of ethnic fractionalization (ELF) from Fearon & Laitin (2003). The variable ranges from 0 to 1 and measures the probability that two randomly drawn people in a country belong to the same group. We refer the reader to Fearon & Laitin (2003) for further details of the sources and the construction of this data. To model the possible effect of both fractionalization and polarization, we enter linear and quadratic terms. As discussed above, resource-wealthy countries, particularly oil-rich states, tend to have closed economies and show a high risk of conflict (de Soysa, 2002; Fearon & Laitin, 2003). Thus, we enter a dummy variable capturing whether or not a country is an oil exporter. This variable oil exporter takes the value of 1 if oil exports are greater than 1/3 of total export revenues and 0 otherwise (Fearon & Laitin, 2003).

Estimation

To examine the influence of economic freedom on the risk of civil conflict, we rely on logistic regression analysis. The estimation reports robust standard errors, clustered by country. To address the problems associated with temporal dependence in time-series–cross-section analysis, we add a variable that records the time since the last onset of armed conflict in the country (with an observation period going back to 1945, the first year of observation in the UCDP/PRIO dataset). Since the influence of an onset of armed conflict can be assumed to decrease over time, we specify the variable as a decay function. The exponential function of the time that has passed without the onset of armed conflict is given by $2^{-\text{time since last onset}/\alpha}$, where $\alpha$ is the half-life parameter. We choose a functional form where the influence of an onset of armed conflict decays over time, with a half-life of two years. For countries with no recorded civil conflict in the observed period, we specify the decay function to be close to zero.

Results

The estimated effects of economic freedom on the probability of civil conflict are reported in Table I. We report the results from our baseline model in Table I, Model 1. The results are in line with the findings of previous research (Fearon & Laitin,
The results are identical if we use a simple imputation of the last observed value for missing years instead of the linearly imputed values for the missing observations between the quintiles from 1970 to 1999. Furthermore, the estimated effect of economic freedom remains negative and significant at the 95% level if we use only the original observations, without any interpolation.

The estimated effect of economic freedom is also substantively large. For a poor country at the lowest 25th percentile of the income distribution emerging from civil conflict, an improvement in the level of economic freedom from the 25th percentile to the 75th percentile reduces the annual predicted risk of civil conflict from 4.7% to 2.7%. In real-world terms, this is analogous to comparing the level of economic freedom in Botswana (since 1998) with that of Sierra Leone (1983–2000), which means that if Sierra Leone were to adopt Botswana’s level of economic freedom then it would roughly halve its risk of reverting to conflict. For point of reference, a similar reduction in risk without improving economic freedom would take a full 8 years of post-conflict peace, which is the same impact as moving from the 25th percentile in the global income distribution to the 75th percentile. Hence, the substantive effect of economic freedom is also comparable with that of per capita income, but presumably much easier to achieve through policy processes and institution-building than through trying to become wealthy.

In reality, the effect of economic freedom on peace is likely to be larger if we also take into account the indirect effect of economic freedom through its impact on income growth. In fact, the estimated effect of income per capita is no longer significant once we control for the level of economic freedom in society, suggesting that these variables are empirically related. Yet, additional diagnostics do not indicate that multicollinearity is an issue (VIF \text{income} = 3.13). We also know that the loss of significance is not due to a sample effect, since the estimated effect of income is negative and significant in the estimation reported in Table I, Model 2 (when economic freedom is not present). Several others have reported that the effect of income on peace is fragile when quality of institutions is included (Fjelde & de Soysa, 2009; Mousseau & Mousseau, 2008). This is not surprising given that several studies interpret the association between income and peace as an effect of state capacity (Fearon & Laitin, 2003). Future studies might focus more vigorously on the relationship between high income, economic freedom, and peace, but we suggest that free markets, where people invest money in productive enterprise free of state theft, surely stabilize social relations more than state capacity alone can achieve. Notice that the relatively high-income, resource wealthy economies of Latin America were plagued by conflict during the two decades spanning 1970–90 to a far greater degree than poorer East and South East Asia, which remained economically more open and friendlier to private investment.

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10 The results are identical if we use a simple imputation of the last observed value for missing years instead of the linearly imputed values for the missing observations between the quintiles from 1970 to 1999. Furthermore, the estimated effect of economic freedom remains negative and significant at the 95% level if we use only the original observations, without any interpolation.

11 All other variables besides economic freedom, income, and conflict history are held at their mean. All substantive effects are estimated using Clarify (King, Tomz & Wittenberg, 2000).

12 See the Fraser Institute’s website for a comprehensive list of studies on economic freedom and income growth (http://www.freetheworld.org).

13 Diagnostics to test multicolinearity have been done on all models in the article. Only ethnic fractionalization and its square show VIF > 10 (the critical value).
The estimated effects for the remaining control variables are largely in line with previous research. More populous countries have a higher risk of civil conflict, ceteris paribus. There is evidence of a curvilinear relationship between level of ethnic fractionalization and civil conflict. The linear term is positive and significant, and the squared term is negative and significant, suggesting that ethnically polarized countries with a small number of equally sized groups have the highest risk of conflict. When accounting for ongoing conflict-years, we find that the risk of a new civil conflict is highest immediately after the last conflict has ended, and then decreases over time. Neither of the dummies identifying democratic and autocratic regimes is significant, suggesting no clear relationship between regime type and civil conflict.

In Table II, Models 4 and 5, we examine the robustness of our results in more detail. First, we estimate our model on a subsample of non-Western countries. The estimated effect of economic freedom remains negative and significant. The result also holds up when we add the variable ‘durable’ taken from the Polity IV data, which counts the number of years a country has been a full democracy since 1800. This suggests that economic freedom is not capturing any effect attributable to mature democracy. A more general concern, however, is that the effect we attribute to economic freedom is due to omitted variable bias, that is, unobserved characteristics with the units that influence both their level of economic freedom and the risk of civil conflict. To control for such time-invariant unobserved heterogeneity, we estimate a fixed-effects regression. The results are reported in Table II, Model 5. Note that all panels without variation on the dependent variable have no effect on the estimation and are automatically dropped when estimating the within effect. The same holds for time-invariant independent variables, such as ethnic fractionalization. Our measure of economic freedom remains negative and significant at the 95% level. This indicates that it is not unobserved attributes of states that drive our results. Furthermore, since fixed effect regression is based on within, rather than between-country comparisons, the result supports the notion that it is not simply variation in the level of economic freedom between states that explains the results but that changes in the level of economic freedom within the countries also influence peace positively.

In Table III, Model 6–8, we test three alternative specifications of the basic model predicting the onset of a civil conflict. In Model 6, we enter a control for the quality of institutions. Separating the effects of capitalism as an economic system from the ‘governance components’ that make up strong institutions is not straightforward. Conceptually, one could have a more free economic system that favors only some people over others – there could be corrupt bureaucracies or weakly institutionalized rule of law, such as protection of property and legal rights – as well as its opposite – relatively closed economic environments for capitalistic activity with ‘good’ governance and little corruption. The variable on the quality of government is from the International Country Risk Guide (ICRG), and is created by taking the mean value of the ICRG variables ‘corruption’, ‘law and order’, and ‘bureaucratic quality’, all scaled to range from 0 to 1. The quality of government measure ranges from 0 to 1, where higher numbers indicate better governance. The association between the quality of government and risk of civil conflict is negative and significant. However, the estimated influence of economic freedom remains negative and significant and is robust to the inclusion of institutional

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14 The same holds when estimating the model within the subsample of non-OECD countries.
15 We have also examined whether the coefficients in our model are sensitive to the inclusion of particular cases. Dropping the 6 country-year observations with the highest dbeta statistics (none of them above critical values by conventional standards) does not significantly change any of our results.
16 The quality of government variable is from the International Country Risk Guide (ICRG). The measure builds on subjective evaluations by country experts. For more information see http://www.prsgroup.com/. The variable is taken from the Quality of Government Dataset (Teorell, Holmberg & Rothstein, 2008).
quality. This suggests that economic freedom matters net of good governance.

An alternative account for why capitalist economies might have less civil conflict is that under such conditions, states are structurally dependent on capital and therefore 'captured' by capitalists that use this power to repress dissent and avoid conflict. In short, the 'hidden hand' might in reality be an 'iron fist', as Marx himself and later Lenin recognized. In Table III, Model 7, we enter a variable measuring the degree of state repression of people's human rights to examine this argument. We use the CIRI measure of human rights, which is a 9-point scale capturing the level of 'physical integrity rights' that consist of freedom from torture, disappearances, imprisonment for political activity, and political murder (Cingranelli & Richards, 1999). The original variable measures rights, but we invert the index so that higher values now denote repression. We find no significant effect of the level of repression on the risk of civil conflict in society as others too have reported (Jakobsen & de Soysa, 2009). Importantly, the estimated effect of economic freedom remains unchanged when repression enters the model, suggesting that the peace effect of economic freedom is not due to the suppression of conflict.

In Model 8, we control for the level of trade openness, which is the most commonly used indicator of liberal economic policies and a standard measure of the extent of exposure to globalization. The level of trade has a negative and significant effect on the risk of civil conflict, but it does not account for the effect of economic freedom reported in previous models, because it remains negative and significant. The results on actual trade volume, thus, support others who show that trade reduces the risk of conflict, even when good institutions and other measures of good policy are present (Bussmann, Schneider & Wiesehomeier, 2005; de Soysa, 2002; Krause & Suzuki, 2005).

### Conclusion

Skeptics of globalization fear the spread of capitalistic economic policies. Apparently, the conditions favorable to capital will drive a 'race to the bottom' where weakened states capitulate to the interests of capital. The empowerment of commercial interests, it is argued, will erode the autonomy of states to act in the best interests of the collective. Communitarian values of harmony and social justice are apparently under threat because of the spread of neoliberal policies, threatening serious dissent. As many claim, the 'long peace' in Europe can be attributed to the way in which states were able to protect societies from the vagaries of market capitalism by adhering to what some have termed 'embedded liberalism' (Ruggie, 1983).

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17 In a previous version of this study, we examined several models of human rights repression with economic freedom as our main independent variable. In this instance too, the result was robustly negative, net of variables measuring good institutions, including the lack of corruption (results available on request).

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### Table III. Logit analysis: Economic freedom and the onset of civil conflict, additional controls

<table>
<thead>
<tr>
<th></th>
<th>(6) Conflict onset</th>
<th>(7) Conflict onset</th>
<th>(8) Conflict onset</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UCDP/PRIO</td>
<td>UCDP/PRIO</td>
<td>UCDP/PRIO</td>
</tr>
<tr>
<td></td>
<td>&gt; 25</td>
<td>&gt; 25</td>
<td>&gt; 25</td>
</tr>
<tr>
<td>Economic freedom</td>
<td>−0.30**</td>
<td>−0.29**</td>
<td>−0.23**</td>
</tr>
<tr>
<td></td>
<td>(0.15)</td>
<td>(0.13)</td>
<td>(0.11)</td>
</tr>
<tr>
<td>Quality of government</td>
<td>−2.13**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(1.02)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repression,1</td>
<td>−0.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.06)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade,1, log</td>
<td>0.02</td>
<td>0.02</td>
<td>−0.46**</td>
</tr>
<tr>
<td>Income per capita,1</td>
<td>0.07</td>
<td>−0.31</td>
<td>0.02</td>
</tr>
<tr>
<td></td>
<td>(0.27)</td>
<td>(0.21)</td>
<td>(0.01)</td>
</tr>
<tr>
<td>Population,1</td>
<td>0.44***</td>
<td>0.40***</td>
<td>0.36***</td>
</tr>
<tr>
<td></td>
<td>(0.10)</td>
<td>(0.11)</td>
<td>(0.10)</td>
</tr>
<tr>
<td>Oil producer</td>
<td>0.03</td>
<td>0.16</td>
<td>0.26</td>
</tr>
<tr>
<td></td>
<td>(0.35)</td>
<td>(0.30)</td>
<td>(0.27)</td>
</tr>
<tr>
<td>Ethnic</td>
<td>8.22***</td>
<td>7.70***</td>
<td>8.28***</td>
</tr>
<tr>
<td>Fractionalization</td>
<td>(2.77)</td>
<td>(2.44)</td>
<td>(1.88)</td>
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<tr>
<td>Ethnic fractionalization sq.</td>
<td>−6.84**</td>
<td>−6.70**</td>
<td>−6.96***</td>
</tr>
<tr>
<td></td>
<td>(2.93)</td>
<td>(2.59)</td>
<td>(1.83)</td>
</tr>
<tr>
<td>Democracy</td>
<td>0.04</td>
<td>0.15</td>
<td>−0.12</td>
</tr>
<tr>
<td></td>
<td>(0.29)</td>
<td>(0.29)</td>
<td>(0.25)</td>
</tr>
<tr>
<td>Autocracy</td>
<td>0.20</td>
<td>0.11</td>
<td>−0.14</td>
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<tr>
<td></td>
<td>(0.31)</td>
<td>(0.28)</td>
<td>(0.25)</td>
</tr>
<tr>
<td>Conflict incidence,1</td>
<td>−0.11</td>
<td>−0.16</td>
<td>−0.35</td>
</tr>
<tr>
<td></td>
<td>(0.37)</td>
<td>(0.30)</td>
<td>(0.30)</td>
</tr>
<tr>
<td>Brevity of peace</td>
<td>1.18***</td>
<td>1.06**</td>
<td>0.77**</td>
</tr>
<tr>
<td></td>
<td>(0.43)</td>
<td>(0.42)</td>
<td>(0.34)</td>
</tr>
<tr>
<td>Constant</td>
<td>−7.85***</td>
<td>−5.00***</td>
<td>−3.99***</td>
</tr>
<tr>
<td>Observations</td>
<td>1898</td>
<td>2347</td>
<td>2922</td>
</tr>
<tr>
<td>No. of countries</td>
<td>107</td>
<td>117</td>
<td>115</td>
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</tbody>
</table>

Robust standard errors in parentheses.
* significant at 10%; ** significant at 5%; *** significant at 1%.
that in weak state environments develop into organized armed activity, what some have termed the ‘remnants of war’ (Mueller, 2004). Most previous studies have tried to address the question of internal peace from the point of view of Marxist ideas of class conflict, often using income inequality in empirical work to capture such dynamics, which simply do not reflect the realities of places that host today’s civil wars, places which do not contain clear class divisions or class-based movements. Our use of a measure that directly captures capitalistic economic policies, the index of economic freedom, is an advance in this regard.

The results robustly support liberal assertions about the development of market-friendly policies and social peace. States that have an economic system favoring private commercial interests and thereby lower involvement of the state in the economy show a lower risk of conflict. The results are robust to several different testing procedures, data, and alternative specifications. They do not support arguments that suggest that globalization weakens state autonomy for acting in the interest of peace. The peacemaking community, which seems to value elections over the building of institutions, may think harder about the ways and means of developing capitalistic institutions and norms that reward investment rather than rent-seeking, alongside the development of legitimate democratic states. Encouraging productive investment and the expansion of functioning markets, after all, are what will legitimize democracy and sustain peace. How much the aid effort from outside associated with building peace and stability reinforces state-led development and discourages autonomous markets is also poorly understood, despite the often-heard catchphrase in policy circles about ‘building liberal peace’ (Paris & Sisk, 2009).

Data replication
The data and do-file used in this study can be downloaded from http://www.prio.no/jpr/datasets.

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