



## Capitalist Development and Civil War<sup>1</sup>

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Capitalism has emerged as a force for peace in studies of interstate conflict. Is capitalism also a force for peace within nations? This article shows how a market-capitalist economy—one where most citizens normally obtain their livelihoods contracting in the market—creates citizen-wide preferences for universal freedom, peace, and the democratic rule of law. Prior research has corroborated the theory's predictions linking market-capitalism with liberal preferences, human rights, and peace among nations. Here, Granger tests of causality show that market-capitalism causes higher income, but higher income does not cause market-capitalism, and from 1961 to 2001 not a single civil war, insurgency, or rebellion occurred in any nation with a market-capitalist economy. Market-capitalism is the strongest variable in the civil conflict literature, and many of the most robust relationships in this literature are spurious—including income, state capacity, and oil-export dependency.

With the advancement of capitalism, argued one of the great economists of the twentieth century, Joseph Schumpeter, people form "an unwarlike disposition" (Schumpeter 1955:66–68). Schumpeter's claim reflected the prevailing view of early twentieth-century modernization theorists, such as Emile Durkheim and Max Weber, who sought to explain what they perceived as changing values associated with the rise of capitalism in Europe. More than a century earlier, Immanuel Kant surmised that "the spirit of commerce...sooner or later takes hold of every nation, and is incompatible with war" (Kant [1795]1939:37).

In the modern field of Political Science, however, capitalism is frequently maligned as a cause of war (Wallerstein 1974), while changing preferences have been largely forsaken as a cause of peace (Collier and Hoeffler 2005). This is so even though the correlation of liberal preferences with economic development has been well established (Inglehart and Baker 2000), and the associations of development with civil peace and stable democracy are among the most powerful and longstanding observations in the study of politics (Lipset 1959; Dixon 2009:723). That mainstream scholarship has overlooked the possibility of preference change linked with development as a cause of peace and democracy is partly an outcome, I suspect, of the failure of many of the old modernization theories that were originally aimed at predicting liberal preferences. But the rejection of a theory should not cause us to refute our observations.

Drawing on new economic norms theory (Mousseau 2000, 2009), this article presents a single and novel account for some of the oldest questions in the study of politics, including the linkages of capitalist development with liberal preferences, civil peace, state capacity, and the democratic rule of law. This account explains liberal values and interests without relying on any of the old modernization school assumptions; nor does it require a great leap of faith: it rests only on the conventional assumption that individuals normally pursue their economic interests with the information available to them. Liberal values and interests are deduced from the uncontroversial axiom that a "market-capitalist" economy is one where profit-maximizing actors exchange goods, services, and labor in free and voluntary contracts.

Prior research has already established that market-capitalism promotes liberal values and peace among nations (Mousseau 2009). This article applies the theory to civil wars and reports compelling results: from 1961 to 2001 not a single civil war, insurgency, or rebellion occurred in any nation with a market-capitalist economy. Market-capitalism appears to be the strongest variable in the civil conflict literature, by a large margin, and many of the most robust long-standing relationships in this literature are spurious—including per capita income, state capacity, and oil-export dependency.

There are several important implications of this article. First, to my knowledge, this is the first study to produce a variable that can account for the well-known impact of economic development on civil peace. It now appears that it is not development per se that causes peace, but a particular form of development—market-capitalism. Second, scholars have long pondered the relationship of capitalism and democracy, wondering how the two can go together when

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they seem rooted in divergent values. Contrary to this assumption, this study shows how market-capitalism and democracy are based on common values and institutions—and why democracy without market-capitalism is characteristically illiberal and unstable. Third, it illustrates how citizens in market-capitalist economies-but not citizens in other economies-have direct interests in their states promoting and sustaining market growth. This may explain why, once market-capitalism emerges, it endures and expands. Fourth, because the theory informs us what governments must do if they wish to create and sustain market-capitalism, it yields specific policy implications for how governments can consolidate democracy and make a nation immune from insurgency, rebellion, and civil war.

It should be clear at the outset that economic norms theory is not rooted in omnipresent classical liberal assumptions regarding free markets in any way. "Market-capitalism" is defined without reference to state regulation policies, and the theory shows how the market way of life may be learned—as the critic of free markets Polanyi ([1944], 1957) famously argued—rather than ingrained in human nature—as neoclassical liberals and property rights theorists assume (Friedman 1970; Fjelde and De Soysa 2009:10–11; North, Wallis, and Weingast 2009).

The article begins with a review of the state of theory and evidence for the origins of liberal preferences and the economic causes of civil war. Next, new economic norms theory is explicated and applied to the study of civil conflict. Following the application of the theory, test procedures are described and the results reported. The final section concludes with the implications for the research areas of civil conflict, democratization, and interstate conflict and cooperation: market-capitalism may be the foremost cause of democratic legitimacy, strong state institutions, and permanent peace within and among nations.

## Liberal Preferences, Wealth, and Civil War

What most social scientists believed a century ago has since been confirmed systematically in myriads of studies: economic development remains the foremost known force for peace in nations (Hegre and Sambanis 2006; Dixon 2009:714). It is also associated with a particular set of values, including social trust (Inglehart and Baker 2000).<sup>2</sup> For most of the preceding century, one of three schools of thought—modernizationist, instrumentalist, and rationalist—has led efforts to explain at least one of these various patterns.

In the 1950s and 1960s, modernization theorists sought to account for the changing values they believed to be associated with development, building theory from various teleological, monotonic, path-dependent, and evolutionary assumptions. Some suggested that both civil peace and economic development may be products of other things associated with

modern life, such as education (Inkeles and Smith 1974), the increasing use of technology (Rostow 1960), or from increasing contacts with the "modern" world (Parsons 1964). Empirical research did not yield much support for any of these theories, however, and by the 1980s, modernization theory was largely discredited for its teleologically induced ethnocentrism, in addition to its disregard of diffusive processes, such as interstate trade, which can disrupt the supposed evolutionary paths of nations (Prebisch 1950).

Due to these problems with modernization theory, in the 1970s and 1980s many scholars began to view with disdain any efforts to account for preference changes or link them with advanced capitalism or peace. Instead, attention turned to the potential conflict-inducing effects of economic development. For instance, relative deprivation theory (Gurr 1970) suggested that the rising expectations of development can cause rebellion when such expectations are not met. After numerous empirical studies seeking to connect inequality with violence, however, the evidence for this linkage remains decidedly mixed (Lichbach 1989).

More recently, the trend turned back to explaining the pacifying impact of wealth, but with strong rationalist assumptions that continue to discount or overlook any role for preference changes. Collier and Hoeffler (2005) offer that countries with low incomes may have more armed conflict due to the low opportunity costs of rebellion. Low-income countries are more likely than others to be dependent on commodity exports, so the production of resources that are lootable—such as diamonds and gold-can alleviate the collective action problem in rising up against the state. Recent research has challenged this thesis, however, because oil exports appear to account for all or most of the impact of commodity exports on war (Fearon 2005; De Soysa and Neumayer 2007). Oil is not lootable in profitable quantities, so the hypothesis is not supported if the export commodity associated with civil conflict is mainly oil (Fearon 2005). Diamonds are lootable, but do not appear to fuel civil unrest (Regan and Norton 2005).

Regardless, oil-export dependency does not account for the wealth and peace relationship, as income has remained the strongest force for peace even after consideration of commodity dependency (Fearon 2005; De Soysa and Neumayer 2007; Dixon 2009). Today, no explanation for how development can cause peace is even being widely considered in the literature: the field seems to have given up trying to explain one of its oldest and strongest observations. There are conjectures that wealth may reflect other factors that might cause peace, such as state capacity (Fearon and Laitin 2003), but no one has identified theoretically or shown empirically any factor that can account for the impact of wealth on peace.<sup>3</sup>

 $<sup>^2</sup>$  The terms ''income,'' ''wealth,'' and ''development'' are used interchangeably throughout this article.

 $<sup>^3</sup>$  After this article was submitted, a study by De Soysa and Fjelde (2010) appeared reporting that control for economic regulation renders income insignificant. As will be seen below, economic regulation is not significant after consideration of market-capitalism.

# How Market-Capitalism Can Change Values and Cause Peace

For many, the term "capitalism" implies the neo-classical liberal assumption that it arises naturally out of a free market (Friedman 1970; Weede 2009). However, if capitalism has a defining feature, it is the voluntary engagement in contract, and contracts can be highly regulated. While capitalism has probably long existed everywhere, a capitalist economy is one that is contractintensive: when most citizens normally obtain their goods, services, and incomes by contracting with strangers located in a market. Moreover, many nations with contract-intensive (or "market-capitalist") economies have highly regulated markets, such as Sweden. A country with high structural unemployment—the condition for many developing countries—cannot be market-capitalist by definition: the dearth of choice in employers means that many employment contracts are not voluntary, as workers do not have reasonable choice and thus lack leverage in negotiating contract

Countless studies in sociology and economics have documented that in societies where a majority of the population is largely excluded from the market, a common form of transaction is not contractual but reciprocal, where favors are exchanged among friends and family (for example, Mauss [1924], 2000; Polanyi [1944], 1957). While in most nations today some form of a market exists, in many developing countries the market is comparatively peripheral to everyday life as many individuals depend partially or wholly not on the market, but instead on social networks (see also North et al. 2009). Friends and family bestow incomes, goods, and services off the market in the form of favors, which are given (or withheld) in the light of prior interactions, usually within small in-groups. Extended family ties are often linked with larger associations that are also based on reciprocity. These can take a variety of forms, including neighborhood groups, gangs, mafias, labor unions, religious sects, political parties and movements, and ethnic, tribal, and clan groups. For instance, in an extended family, a cousin may do all the electrical work, an uncle may perform all injections, and an aunt with larger ingroup ties may find local government jobs for various family members—all of whom are in turn obligated to share their incomes with family members. In the field of economics today, these kinds of transactions are often assumed to be non-economic because they are not contractual. Contrary to this assumption, they are, in fact, economic transactions performed as favors among individuals in relationships which are expected to be reciprocated.

A number of divergent interests can emerge from differing contract-rich and contract-poor (or "clientelist") economic conditions (Mousseau 2000, 2003, 2009). First, markets cannot function in anarchy and individuals cannot automatically trust strangers in making contracts. An individual dependent on contracting with strangers in a market thus has a direct interest in the state acting as a reliable and efficient arbiter of contractual disputes. It follows that in market-capitalist

economies, where by definition mostly everyone is highly dependent on trusting strangers in contracts, citizens have direct interests in their states reducing the risk of contracting by enforcing the rule of law and contracts reliably and impartially. In this way, a market-capitalist economy may be the most important source of widespread legitimacy for the state to possess the monopoly on the use of force—a legitimacy that lasts only so long as the state enforces the law reliably and impartially.

Second, for individuals dependent on contracting with strangers located in a market, a larger market offers more opportunities than a smaller one. This means citizens in market-capitalist economies have direct interests not only in their own freedom, but in the freedom (to contract) of everyone else. There is no apparent reason to limit this interest to one's own ethnic group, religious sect, or nation. Citizens thus have interests not only in their states protecting individual rights at home, but in their states promoting the rights of others abroad. This may explain why market-capitalist societies have the most secure protections of political rights, and push these rights onto the global agenda (Mousseau and Mousseau 2008). Within a nation, there is no collective action problem in the promotion of freedom because the theory predicts only value change, not any action that may have costs, and a widespread preference for freedom will alone reduce the influence of those advocating any form of autocracy. Altogether, it is easy to see how the marketcapitalist-induced interests in the rule of law, impartial governance, and freedom can legitimate liberal democracy and why market-capitalism and democracy

Third, for individuals dependent on contracting with strangers located in a market, wealthier markets offer more opportunities than poorer ones. Citizens are thus in a positive sum game: any improvement in the welfare of anyone else in the market increases the odds that one's own welfare will improve, making the promotion of the general welfare beneficial for everyone. Citizens thus widely agree on the importance of market growth and, as a consequence, governments of marketcapitalist societies, being largely democratic, face unremitting pressure from voters to continuously promote it. Oftentimes, this results in heavy public spending to create jobs. In this way, market-capitalism, once established, endures and expands, as pro-growth proemployment policies demanded by a plurality of citizens end up sustaining widespread inclusion in the market, further institutionalizing societywide agreement on the value of equal rights, the rule of law, and the importance of continuing market growth. While neo-classical liberals and others tend to credit marketcapitalism as inherently expansionary for reasons that are metaphysical, here it is easily identifiable that the historical expansion of market-capitalism can have a simple and worldly explanation—and why advanced economy is synonymous with market-capitalist democracy.

Wars cannot happen within or between market-capitalist nations because war requires the harming of others, and citizens in these nations are always better off when others in the market are better off, not worse

off. At home, citizens will not initiate large-scale violence unless the state is undemocratic or fails to enforce contracts and the rule of law equally and impartially—as was the case with the American Revolution against British taxation without representation. Abroad, market-capitalist nations have common interests in promoting each others' markets because successful political parties have learned to promote exports to enhance market growth. Since constituents reward and punish leaders according to how well they produce market growth at home—not according how well their economy is growing relative to other capitalist economies—there is little competition among these nations for relative gains. Since each nation's growth contributes to a larger global marketplace—and because there are few concerns over relative gains—market-capitalist democracies easily cooperate on anything that can preserve and enhance the global marketplace. This means not only cooperation on trade issues, but also on the defense and promotion of global law and order, as law and order is always more profitable than war and chaos. In fact, market-capitalist nations tend to agree on global issues (Mousseau 2003) and, as far as the data inform us, not a single fatality has occurred in any dispute between two market-capitalist nations, an outcome that is highly unlikely to merely be the result of chance (Mousseau 2009).

Individuals in clientelist economies have quite different interests. The dearth of opportunities in their marketplaces and prevailing habits cause many to sustain their in-groups or form new ones, whose leaders pursue group interests off the market in politics. As a result, the market is not the main avenue of survival and individuals are generally not dependent on trusting strangers; thus, there is little interest in the rights or welfare of strangers or in the impartiality of their states. Instead, individuals primarily have interests in the promotion of the welfare and privileges of their groups.

In contrast to market-capitalist societies, clientelist societies face the perpetual threat of armed conflict, for two reasons. First, groups must have, by their very nature, some militant capability. Organized on the principle of reciprocity (Mauss [1924], 2000), group leaders deliver the gifts of expected economic and physical security for their clients, who respond with loyalty to group leaders rather than to their states (Eisenstadt and Roniger 1984:43–165). This means there is no collective action problem in the resort to violence, as the decision to rebel rests not in the hands of individuals, but instead with the group leaders; and there is no collective action problem for leaders.

Second, in a clientelist economy, wealth is obtained in politics, and in modern states this usually means the pursuit of state rents. Because state rents obtained by one group are a loss for another, groups in clientelist states are in a constant state of conflict over distributive gains—a zero sum game.<sup>5</sup> As a result, any coalition of groups in power must privilege its supporters and repress everybody else, giving the state little incentive to provide public goods—including law and order and market growth. This may explain why nations with contract-poor economies tend to lack stable and liberal democratic institutions, normally have poor records on human rights, and often have corrupted, weak, politically partial, and sometimes dysfunctional states.

Insurgency is when rebels obtain support from civilians who dwell in areas of rebellion. Insurgency cannot happen in a market-capitalist economy, because each family residing in an area of rebellion must make its own decision on whether to support the insurgents, with all the attendant risks and collective action problems. Rebels cannot know who to trust and who will report their movements to authorities. In contrast, a clientelist economy forces members of groups that are not directly engaged as fighters to nevertheless demonstrate loyalty to group leaders by abiding by orders to shelter and supply rebels. Rebels thus know who to trust and who not to trust and can more effectively hide from authorities and obtain succor from noncombatants.

An act of terror is the engagement in indiscriminant violence motivated for political ends. While social science is unlikely to predict the decision of a loner or small group of individuals to engage in acts of terror, political science can seek to model popular approval of it. In clientelist societies, where individuals compete in groups over state rents, there are not common, but instead inimical, interests among strangers from divergent in-groups. This makes terrorizing members of out-groups—including genocide and other forms of sectarian violence—cost-effective means of obtaining state rents. Usually, this happens with low levels of violence, such as bomb threats or small bombings that kill or injure few civilians. In many contract-poor countries, these "normal" acts of terror are often not reported to the police or the media, for strategic reasons, and remain largely undocumented.<sup>6</sup> International terror is the continuation of local politics across borders, made all the more common as the world shrinks with globalization (Mousseau 2002–2003).

While the economic norms model as presented thus far has assumed instrumental rationality—that citizens identify their interests based on the information available to them—the theory works even better with the recognition of bounded rationality (Mousseau 2009:58). Introduced by Herbert Simon in the 1950s, bounded rationality draws on the fact that it is not rational to be rational: many goals can be reached more efficiently by forming decision-making

<sup>&</sup>lt;sup>4</sup> In the subfield of International Relations, the term "capitalist peace" has been applied to arguments that define capitalism with free markets rather than with contract-intensive economy (see Mousseau 2010 for a review of all capitalist peace arguments regarding relations between states). To my knowledge, these theories have not been applied to civil conflict. Other arguments linking free markets with civil conflict are addressed below.

<sup>&</sup>lt;sup>5</sup> This is also true for nations largely dependent on foreign aid or the export of oil, as long as the state controls the distribution of these resources, which is true in most cases.

<sup>&</sup>lt;sup>6</sup> For instance, at a university in Turkey, a nation with a contract-poor economy, I was once a victim of a nail bombing (I was uninjured), believed to be perpetuated by the local branch of a national political party. The rational response to such terror is to avoid publicizing it, and the news media were never informed of the event.

habits, or heuristics, for situations that arise routinely (Simon 1955). As applied here, individuals routinely dependent on trusting strangers in contract will develop the habits of trusting strangers and preferring universal rights, impartial law, and liberal democratic government. Individuals in contract-poor economies, on the other hand, will develop the contrary habits of trusting and caring for others within their in-groups, abiding by the commands of group leaders, and distrusting those from out-groups, including their states. In this way, citizens in highly capitalist economies will perceive an interest in freedom and democracy and promoting these institutions for everyone, even though most, acting on bounded norms rather than on instrumental rationality, may not know why they have these universalisliberal values. Citizens in contract-poor economies, in contrast, will be comparatively more susceptible to the appeals of those who offer strong in-group identities and warn against the threats of outsiders, even though most, acting on bounded norms rather than on instrumental rationality, may not know why they are susceptible to such fears or why they place such great value on loyalty to their groups and group leaders.

In these ways, economic norms theory (Mousseau 2000, 2009) offers insights for understanding the economic, social, and political transformations of nations. If, for whatever reason, a contract-poor economy manages to sustain employment opportunities in the marketplace over an extended period of time, increasing numbers of individuals, perhaps those in the bottom rungs of their groups, will choose to opt out of their group securities and take the risk of trusting strangers in the marketplace.<sup>7</sup> An exogenous rise in the market can launch a catalytic effect: as more individuals accept the risk of the market, the more complex its division of labor, and thus lucrative, it must become, making the market increasingly attractive. However, because no one can trust the commitments of strangers, a norm of contracting must emerge concurrently with a norm of third-party enforcement of contracts. Historically, private parties have emerged to fulfill this task. Yet, the private enforcement of contracts remains costly, and historically no contract-intensive society has emerged relying exclusively on the private enforcement of contracts.

Just as modern governments may choose to bear the costs of public goods, in pre-capitalist economies with rising markets, a territorial authority could choose to bear the burden of enforcing contracts. In order to do so, however, an entity must usurp the monopoly on violence over a declared geographic area of contract enforcement—that is, it must construct a modern state. If exogenous factors continue to make the market profitable within a state, increasing numbers of individuals are likely to opt out of their in-group secu-

rities. Simultaneously, as contracting with strangers in the market emerges as a habit, or bounded norm, the frequency of contract violations must decrease, further reducing the risk of dealing with strangers, leading to an even further increase in the profitability of the market over rent-seeking. At some point, a society crosses the tipping point, and contracting in the market emerges as the prevailing way of life.

In this way, engaging the market-market-capitalism—may be learned and not ingrained in human nature as neo-classical liberals assume (Friedman 1970; Fielde and De Soysa 2009:10-11; Weede 2009), as is modern government, states, and liberal democracy. While property rights theorists and neo-classical liberals inform us that good governance and free markets are sufficient conditions for market growth, economic norms theory informs us that good governance is merely a necessary condition for market growth, since a reduction in the risk of contracting is largely irrelevant for societies where opportunities in the market are outweighed by the securities of groups. Market-capitalism causes good governance because it creates a demand for it and thrives with it; however good governance is not a sufficient cause of market-capitalism.

It is well documented that societies in northwestern Europe started becoming contract-intensive starting as early as the fifteenth century (Braudel 1982), and these changes were followed—not preceded—by a rise in ideas favoring the formation of states and individual freedom. These movements were manifested with the Protestant Reformation—which institutionalized the notion of states having the monopoly on the use of force over a geographic space with the 1648 Treaty of Westphalia—followed by the Enlightenment. By the eighteenth century, however, only three nations may have crossed their tipping points into a market-capitalist economy: Holland, Switzerland, and the northern colonies of British North America, led foremost by the Massachusetts Bay Colony (Wood 1998). According to direct data on contracting in nations (below), by 1960 eleven countries had contract-intensive economies: Australia, Belgium, Canada, Denmark, Netherlands, New Zealand, Norway, Sweden, Switzerland, the United Kingdom, and the United States. In the following decade, Finland, France, Germany (West), and Japan transitioned, followed in the 1970s by Austria, Ireland, Israel, and South Africa. In the 1980s, Cyprus, Italy, Singapore, South Korea, Spain, and Taiwan probably crossed their tipping points, followed in the 1990s by Chile, Greece, Malaysia, Portugal, and Slovenia. By the end of the millennium, an additional ten countries were approaching the transition: Argentina, Czech Republic, Hungary, Iceland, Mauritius, Mexico, Panama, Poland, Thailand, and the United Arab Emirates.

While market capitalism promotes economic growth and development, market-capitalism is not the only source of wealth; thus, market-capitalism and development are related but distinguishable. Prior research has already established that it is market-capitalism, not development, which promotes social trust within nations and peace among them (Mousseau 2009:61). This article focuses on a third major implication of economic norms theory: that market-capitalism causes

<sup>&</sup>lt;sup>7</sup> Historically, market-capitalism has been triggered with neighborhood effects (such as having a neighbor with a capitalist economy), environmental effects (such as having an open frontier of forest or farm land), or with government spending aimed at sustaining full employment (such as the Keynesian and social market policies adopted by many European governments after World War II).

peace within nations. If market-capitalism causes both development and peace as expected, then the state of knowledge from prior research that leaves low per capita income as the leading cause of civil war may be spurious. The following sections are aimed at testing this and related hypotheses.

## Analytic Procedures for Testing Market-Capitalism and War

This study introduces a new variable to the civil war literature, so it is beneficial to construct the test conditions so that the outcome cannot be arbitrarily affected. I thus report results using the exact data and measures of a recent comprehensive study of civil war undertaken by Fjelde and De Soysa (2009), whose design is appropriate for the task at hand and who put forward arguments contrary to those presented here. In addition, to make the analyses as rigorous as possible, I consider the potentially confounding effects of the most robust variables in the study of civil conflict as identified in a recent meta-analysis by Hegre and Sambanis (2006).8 Thus, the results below are the most robust possible given the present knowledge in the field, and aside from one minor data correction and one minor reconstructed measure (all identified below), any differences in results here from prior leading studies can be attributed only to the new variable for market-capitalism.

In accordance with the standard procedure in civil war studies, Fjelde and De Soysa (2009) use a pooled design of nations aggregated annually. To gauge civil conflict, they rely on the PRIO/Uppsala Armed Conflict Dataset, version 4-2006b (Gleditsch, Wallensteen, Eriksson, Sollenberg, and Strand 2002). These annually aggregated data document all armed civil conflicts between the government and at least one other party that led to at least 25 battle-related fatalities in a year, including those that occurred from insurgency, sectarianism, and terror. Following Fjelde and De Soysa (2009), I report the results using two dichotomous indicators of conflict intensity: Armed Conflict indicates years when an intrastate conflict began and resulted in at least 25 battle-related deaths; War indicates years when an armed conflict began which resulted in at least 1,000 battle-related deaths. Following these authors, continuing years of conflict and war are dropped from the sample.10

## **Measuring Contract-Intensive Economy**

A market-capitalist economy is defined as one that is contract-intensive, where most citizens regularly obtain goods and services contracting with strangers located in a market (Mousseau 2000, 2009). The key causal variable is therefore contracts in force, per capita, and direct data on contracts in force have been compiled under the auspices of the World Bank (Beck and Webb 2003). While these data cover only the life insurance sector, life insurance contracting has several features that render it an ideal indicator of the overall intensity of contracting in a nation. Foremost, compared with other goods and services, we can be confident that most life insurance contracts are purely impersonal exchanges, where credibility in commitments can rest only on third-party enforcement, for two reasons. First, life insurance contracts cannot occur in spot trades, where goods are fully exchanged at one time and place, such as groceries, where credibility in contractual commitments is a not an issue. Second, while many non-spot trades can be made credible by personal knowledge and thus trust among contractees—and the threat of the loss of future contracts in the event a party fails to fulfill its obligations—for life insurance contracts personal trust and the threat of the loss of future contracts cannot render an insurer's commitments to a policy holder credible, given that the delivery of service is expected only after the death of the policy holder. In these ways, compared with trading in other goods and services, we can be confident that life insurance contracts are genuine impersonal exchanges.

A second feature of life insurance contracting that makes it an ideal indicator of market norms in a nation is that, while contracting exists at various levels in most sectors of all economies, in the transition from clientelist to contracting economy, life and other forms of insurance protection are probably the last sectors to be commodified. This is because an insurance contract offers long-term protection against catastrophe; yet long-term protection is the sine-qua-non of clientelism, which is fundamentally based on long-term commitments of mutual welfare, including the protection of spouses and children who inherit relationships. It is one thing to contract in the market for short term needs, such as groceries and incomes, but a nationwide norm of contracting-out long term economic security is a strong indication that social relationships are playing a minimal role in an economy.

The linkage of insurance contracting with overall contracting is also clear from the historical record: the first known insurance contract dates from Genoa in 1343, at the time the center of Mediterranean trade, while the first market in insurance appeared in seventeenth-century London, the center of rising trade at that time, involving merchants, ship owners, and traders meeting at The Lloyds Coffee House (Nelli 1972). Validity checks also confirm high correlations of life insurance contracting with other measures that are generally based on contracting data, such as receipts in food retailing (0.83) (Euromonitor 2003) and estimates of private consumption (0.83) and investment

<sup>&</sup>lt;sup>8</sup> In most cases, I use the exact data and measures of Hegre and Sambanis (2006), excluding those variables which overlap with Fjelde and De Soysa (2009). Specifically, I consider all the Hegre and Sambanis variables listed in Table 4 (Hegre and Sambanis 2006:528). In cases where multiple variables gauge the same concept, I included those they identified as most robust. For details in variable constructions, I refer readers to these articles; brief explanations are noted in the tables herein.

<sup>&</sup>lt;sup>9</sup> See the Uppsala Conflict Data Program webpage. (Available at http://www.ucdp.uu.se).

<sup>&</sup>lt;sup>10</sup> See Fjelde and De Soysa (2009) for further details on analytic procedures. I made one small change to these authors' data: the PRIO/Uppsala data do not distinguish domestic from international acts of terror and thus identify the United States as in civil war in 2001 due to the foreign terrorist attack of September 11 which resulted in roughly 3,000 fatalities. International terror attacks have little or nothing to do with the processes modeled in civil war studies, which examine only domestic conditions. I thus reset the dependent variables for the United States in 2001 to 0.

(0.83) from the Penn World Tables (Heston, Summers, and Aten 2002) (all measures logged and per capita). In prior studies, the life insurance data have been used to confirm powerful roles for market-capitalism in interstate conflict (Mousseau 2009) and human rights (Mousseau and Mousseau 2008).

Data on life insurance are available for about onethird of nations, many over the time span of 1960-2000, and missing data can be safely assumed to reflect low levels of contracting. This is because economic norms theory informs us that contract-rich societies are more likely than contract-poor ones to produce data, and when missing data are not random in some known way, it is best to use this knowledge in estimating missing values (King, Honaker, Joseph, and Scheve 2001). There are at least two reasons to assume missing data indicate contract-poor economy. First, for enforcement purposes, contracts are recorded, leaving written records. Reciprocating transactions, in contrast, cannot be recorded because they are framed as favors. Missing life insurance data can thus result from there being few life insurance contracts to record. Second, as discussed above, governments of market-capitalist nations are constrained by voters to ardently pursue continued growth in their markets. They have thus learned to collect, analyze, and make widely available all kinds of economic data. In this way, the very origins of the modern field of economics might be rooted in contract-intensive economy. Governments of clientelist nations, in contrast, have the opposite incentive: their primary task is to distribute state funds to supporters, often illegally, so their preference is to avoid collecting and reporting economic data of any kind. The systematic difference of the missing data from the known data is confirmed with validity tests, which show that most nations with low levels of private consumption and investment (Heston et al. 2002)—roughly reflecting contractintensive economy—are not recorded in the life insurance data.

To facilitate the treatment of missing data, the variable was dichotomized at the median, with nation-years below the median and those with missing data valued at zero. This cutoff point was chosen because the life insurance data, when logged, form a strong bimodal distribution separated almost perfectly at the median. Since there are fewer nations near the median than elsewhere, it offers the most error-free cutoff point, given that we have no other reason to choose any other point in the scale. This dichotomous variable is named *Contract-Intensive Economy* (CIE)<sub>Binary</sub>.

However, a continuous measure offers more information than a binary one, and it is possible to impute missing values in the continuous data using secondary sources. Missing values are not a blank slate: we know a great deal about them from other data sources. Just as standard measures of economic development and trade rely on the imputation of missing values from secondary sources to ensure against biased estimates resulting from listwise deletion (Gleditsch 2002), the life insurance data can be expanded to ensure against such bias. Tests confirm that the following factors yield a measure that correlates at 0.97 with life insurance

contracts in force: per capita private consumption (kc) and investment (ki); ratios of kc and ki to foreign trade; energy consumption per capita; communist economy; postcommunist economy; oil-export dependency; population; and various controls for regions and sample size variations that occur over time. The extremely high correlation of the predicted measure with the original data indicates that the imputed values yield a highly reliable gauge of the direct data on life insurance contracts in force. I call the variable CIE.<sup>11</sup>

While it is important that the tests consider all known robust variables in the field, it is equally important that test models be guided by theory that distinguishes confounding from intervening variables (Blalock 1979:474; Ray 2003:14). Confounding variables are those that in theory may cause both the test variable and the dependent variable and seem unlikely to be caused by the test variable. Of the robust variables in the study of armed conflict guided by economic norms theory, three clearly fit this description: Ethnicity, Population, and Past Conflict. These variables are unlikely to be caused by market-capitalism, but each may have some causal impact on market-capitalism. These variables are included in all regressions since their exclusion would unnecessarily raise the specter of obtaining spurious results (Blalock 1979:473-474; Ray 2003:8-10). For replication purposes, all data are available at http://home.ku.edu.tr/ ~mmousseau/. 12

#### Results

Initial bivariate regressions of CIE<sub>Binary</sub> and war (unreported) produced a startling result: there has never been a civil war in a nation with a contract-intensive economy, at least over the 1961–2001 period of observation. Chi-square tests establish that the odds of this being due to chance are one thousand to one. Further tests yield only three cases of Armed Conflict onsets in countries with contract-intensive economies. The odds of this being due to chance are less than one thousand to one. It is thereby possible to state with confidence that nations with market-capitalist economies do not have civil wars, and they very rarely have civil armed conflicts.

A closer look at the three armed conflicts that did occur in market-capitalist nations shows that all are related to terror groups; none were insurgencies or rebellions. Terrorist attacks can be carried out by extremely small groups that lack popular support. Economic norms theory models social values and preferences, not the behaviors of a few. In fact, two of these three conflicts are from of acts of terror carried out by groups that may have lacked widespread support. One was from Basque-related terror in Spain, from 1991 to 1992; the other was from a terror bombing in North-

<sup>&</sup>lt;sup>11</sup> The measure is in US dollars per capita, logged. All steps in the construction of the CIE measure are transparent and can be replicated at http://home.ku.edu.tr/~mmousseau/.

<sup>&</sup>lt;sup>12</sup> Ethnicity is called *Ethnic Fractionalization* by Fjelde and De Soysa (2009), who use a nonlinear functional form by including the square of the term. In the analyses here, the added square of the term never reaches significance and is not included. Its omission has no effect on results.

TABLE 1. Market-Capitalism and Income on the Risk of Armed Conflict in Nations<sup>†</sup>

	Armed Conflicts						Wars					
Variables	Model 1			Model 2			Model 3			Model 4		
	β	SE	α	β	SE	α	β	SE	α	β	SE	α
Contract-Intensive Economy	-	-	_	-0.33	0.10	0.001***	-	-	-	-0.53	0.14	<0.001***
Income <sup>‡</sup>	-0.31	0.11	$0.006^{***}$	0.06	0.13	0.641	-0.41	0.15	$0.006^{***}$	0.09	0.19	0.616
Ethnicity <sup>§</sup>	1.01	0.43	$0.019^{**}$	1.19	0.42	$0.004^{***}$	0.99	0.58	$0.090^{*}$	1.20	0.56	$0.033^{**}$
Population	0.15	0.07	$0.043^{**}$	0.16	0.07	$0.020^{**}$	0.25	0.08	$0.003^{***}$	0.24	0.08	$0.002^{***}$
Past conflict <sup>††</sup>	0.58	0.26	$0.028^{**}$	0.46	0.27	$0.082^{*}$	1.39	0.48	$0.004^{***}$	1.24	0.49	$0.011^{**}$
Intercept	-2.96	1.19	$0.013^{**}$	-5.53	1.27	< 0.001 ***	-4.15	1.59	$0.009^{***}$	-7.38	1.80	< 0.001***
Pseudo-LL		-516			-509			-248			-243	
Pseudo-R2		0.04			0.05			0.06			0.08	
Observations		4,206			4,206			4,443			4,443	

(Notes. †All independent variables lagged 1 year; standard errors corrected for clustering by country. \*\*\*P < 0.01, \*\*P < 0.05, \*P < 0.10.

ern Ireland in the United Kingdom in 1998. In both cases, there are many indications that at the time these attacks occurred the responsible terrorist groups did not have significant support from their constituent communities. Also, in 1991 Spain had only recently (in 1986) transitioned into contract-intensive economy, as had, I suspect, Northern Ireland in 1998.

Still, the third terrorist conflict appears as an anomalous case: it too occurred in the United Kingdom and was related to the Troubles in Northern Ireland, but this time over the much longer period of 1971-1991. The United Kingdom has been marketcapitalist since at least 1960, and most observers would probably agree that there was significant approval of acts of terror in Northern Ireland throughout this period. This single-case anomaly to economic norms theory could be explained by an ecological fallacy: the tests here are performed at the national level, but economic norms theory is not beholden to this level, and until very recently Northern Ireland was a contract-poor region in a contractrich nation.

Given that the measure CIE<sub>Binary</sub> generates perfect or near-perfect predictions of peace, the continuous measure of CIE is used for the regression analyses that are necessary in order to consider the affects of other variables. Model 1 in Table 1 examines Armed Conflicts without consideration of CIE, including only Income and the control variables Ethnicity, Population, and Past Conflict. As can be seen, the coefficient for Income (-0.31) is highly significant and negative. This corroborates our expectation from numerous prior studies that per capita income reduces the probability of armed conflict. Model 2 extends knowledge by including control for market-capitalism. As can be seen, the coefficient for CIE (-0.33) is highly significant and negative, and the coefficient for Income (0.06) is now in the positive direction. Models 3 and 4 report similar results for analyses of War onsets. All models corroborate the test hypothesis: the pacifying impact of income as reported in most prior studies

appears to be a function of market-capitalism, not income per se.

While Income and CIE correlate highly at 0.77, we can be confident that the models are not adversely affected by multicollinearity, for two reasons. First, the variance inflation factor for Income in models 2 and 4 is no higher than 3, well below the usual rule-of-thumb indicator of multicollinearity of 10. Second, identical results appear with income gauged using energy consumption per capita (logged) (Singer, Bremer, and Stuckey 1972) rather than GDP (unreported to save space). The energy consumption measure correlates with CIE at only 0.58—well below the rule-of-thumb danger zone of 0.70.

Nor is it likely that the causal arrow is reversed with Income being the ultimate cause of CIE and peace—for two reasons. First, correlations between independent variables are not calculated in the results of multivariate regressions: coefficients show only the effect of each variable after the potential effects of the others are excluded. If it were Income that caused both CIE and peace, then there would be some variance in Income remaining, after its partial correlation with CIE is excluded, that links it directly with peace. The positive direction of the coefficient for Income informs us that no such direct effect exists (Blalock 1979:473-474).

Second, Granger tests indicate that CIE may cause Income, but Income does not seem to cause CIE. Granger tests operate on the principle that if X causes Y, then past values of X should predict Y after controlling for past values of Y and vice versa for Y causing X (Freeman 1983). With regard to predicting Income, tests show that all examined lags of CIE (t-1...t-25) are significant and in the expected direction, after controlling for all significant past values of Income (t-1... t-15). The block F-tests comparing the unrestricted and restricted models for Income show that market-capitalism is a highly significant force for Income (F(20,1624) = 2.25, P < .001). With regard to predicting CIE, tests show that all lags of

<sup>&</sup>lt;sup>‡</sup>Natural log of gross domestic product (GDP) per capita variable in Expanded Trade GDP 5.0 data set (Gleditsch 2002).

<sup>§</sup>Ethnic Fractionalization index (Fearon and Laitin 2003).

Natural log of Population variable in Expanded Trade GDP 5.0 data set (Gleditsch 2002).

†\*Called Brevity of Peace by Fjelde and De Soysa (2009), calculated as 2<sup>(-time since last onset of conflict/2)</sup> (Raknerud and Hegre 1997).)

Income are either insignificant or significant in the opposite direction, after controlling for all significant past values of CIE (t - 1... t - 25). <sup>13</sup>

While economic norms theory informs us that market norms promote the rule of law, neo-classical liberals and property rights theorists claim the reverse: that the rule of law promotes market growth. Neo-classical liberals and property rights theorists assume that the propensity to barter is natural and thus expect markets to grow wherever the state effectively enforces contracts (Clague, Keefer, Knack, and Olson 1999); economic norms theory reverses these views: it assumes the propensity to barter is learned and expects states to be more likely to enforce contracts wherever markets grow (though improved rule of law can promote market growth if a population already has market norms). If the neo-classical liberals and property rights theorists are right, then the rule of law could be a confounding variable in Table 1, rendering the impact of market-capitalism on peace spurious. Therefore, data were obtained on the Rule of Law from the World Bank (Kaufmann, Kraay, and Mastruzzi 2010). Unfortunately, high correlations of Rule of Law with CIE, along with severe data limitations, cause all variables to be insignificant in all regression and Granger tests, leading to inconclusive results.14

#### **Further Tests**

The analyses in Table 1 report a crucial result for understanding the onset of armed conflicts and civil wars, for they show that the impact of per capita income—the most consistently powerful variable in civil war studies—is probably spurious: the more likely culprit is market-capitalism. Still, the analyses by Fjelde and De Soysa (2009) and Hegre and Sambanis (2006) identify an additional fourteen variables as the most robust today in the study of civil conflict. To the extent that any of these variables may cause marketcapitalism, the results in Table 1 could be spurious. However, there is also reason to suspect that all of these variables may, like income, be at least partly explained by market-capitalism. If inclusion of a variable theorized as partly caused by CIE appears to reduce the impact of market-capitalism on armed conflict, this cannot logically be interpreted as against the theory, because the theory actually predicts this outcome (Blalock 1979:468-474; Ray 2003:8-10). Some take the position that such variables should never be considered (Ray 2003). My view is that they can be considered, as long as their potential-intervening status is made explicit and interpreted appropriately. Therefore, all potential-intervening variables are examined separately, with a specific discussion of their possible relationships with market-capitalism. I also consider economic freedom and trade, as some might suspect these, too, are potentially confounding variables. Due to space limitations, I report analyses of Armed Conflicts rather than Wars; the results are almost identical, and important differences are identified.

Initial tests showed that four variables from Hegre and Sambanis (2006) were insignificant in analyses of either armed conflict or war onsets, with or without consideration of CIE: Trade (as percent of GDP); Decade 1991–2000; Cold War (period before 1990); and Autonomy (country has autonomous regions). Results with these variables are thus not reported. The remaining twelve variables examined in Table 2 were all initially found significant without control for CIE, controlling only for Ethnicity, Population, and Past Conflict. As can be seen, the CIE variable remains negative and significant in every model. It is also highly robust, causing seven of the twelve most robust variables in civil war studies to become insignificant.

#### Economic Freedom

As discussed above, a market-capitalist economy does not mean a free market economy. Yet the idea that capitalism means economic freedom is widely popular, so I suspect that some readers might view the results shown here with market-capitalism as potentially spurious, with free markets the ultimate cause of both contract flows and civil peace. In fact, to my knowledge, there is little systematic evidence linking *Economic Freedom* with *Economic Growth*, which do not correlate in the sample at all (0.08). As can be seen in Model 1 in Table 2, Economic Freedom (0.00) is not even close to significant once consideration is given to CIE.

### Economic Growth

Many studies link economic growth with civil peace, and economic growth in a clientelist economy can promote market norms. In this way, economic growth could be a confounding variable accounting for the impact of market-capitalism on peace. Model 2 shows that CIE (-0.31) holds firm even with consideration of *Economic Growth* (-6.24), which is also significant. This is reasonable from the perspective of economic norms theory, since economic growth in a clientelist economy yields governments an increased capacity for accommodating the pre-growth demands of groups. <sup>15</sup>

#### Contract-Intensive Money

Fjelde and De Soysa (2009:10–11) offer that nations with citizenries who trust the state as an impartial enforcer of contracts will be at less risk than others of civil conflict. To gauge such trust, they use Contact-Intensive Money (CIM), which is the ratio of non-currency money to all money, which is assumed to reflect contracting (Clague et al. 1999). In fact, CIM can reflect contracting only if we assume that currency held outside banks is flowing in contractual exchange-

<sup>&</sup>lt;sup>13</sup> Fisher panel-unit and augmented Dickey–Fuller unit-root tests indicate non-stationarity in the measure of GDP, but not CIE or energy consumption per capita, so energy consumption was used to measure Income. Hausman tests indicate the presence of fixed effects in analyses of both CIE and energy consumption, so all tests were conducted controlling for fixed effects.

<sup>&</sup>lt;sup>14</sup> In fixed-effects regression, only analyses of Rule of Law t-2 is possible, given available data for both variables only for the years 1996, 1998, and 2000.

<sup>&</sup>lt;sup>15</sup> This does not mean higher income reduces the risk of war, since groups are expected to continuously revise their demands in light of changing rent-seeking opportunities.

Table 2. Market-Capitalism on the Risk of Armed Conflict Controlling for Potentially Confounding Variables

Models		Test Variables		Contract- Intensive Economy (CIE)		Ethnicity	Population	Past Conflict	Intercept		Correlation
		β	SE	β	SE	β	β	β	β	N	with CIE
1	Economic freedom <sup>a</sup>	0.00	0.08	-0.32	0.12***	1.13	0.22	0.59	-5.65	2,475	.45
2	Economic growth <sup>b</sup>	-6.24	$1.54^{***}$	-0.31	$0.09^{***}$	0.78	0.22	0.12	-5.32	3,787	.07
3	Contact-Intensive Money <sup>c</sup>	-0.96	0.84	-0.25	$0.11^{**}$	0.88	0.18	-0.07	-4.35	3,051	.58
4	Oil <sup>d</sup>	0.26	0.27	-0.29	$0.08^{***}$	1.17	0.16	0.29	-5.12	4,233	18
5	State capacity <sup>e</sup>	-0.21	0.25	-0.31	$0.09^{***}$	0.83	0.19	0.13	-4.90	3,171	.09
6	Govt. spending <sup>f</sup>	-0.12	0.31	-0.32	$0.11^{***}$	1.10	0.20	0.23	-4.99	3,041	.35
7	Electoral regulation <sup>g</sup>	-0.18	0.11	-0.28	$0.09^{***}$	1.06	0.19	0.32	-4.71	3,837	.42
8	Anocracy <sup>h</sup>	0.58	$0.20^{***}$	-0.31	$0.08^{***}$	1.08	0.18	0.37	-5.29	4,173	11
9	Regime instability <sup>i</sup>	1.21	$0.20^{***}$	-0.28	$0.09^{***}$	0.89	0.18	0.27	-5.36	3,785	20
10	West <sup>j</sup>	-0.11	0.57	-0.31	$0.08^{***}$	1.01	0.20	0.23	-5.31	3,926	.68
11	Neighbor at war <sup>k</sup>	0.45	$0.23^{**}$	-0.29	$0.09^{***}$	0.89	0.16	0.26	-5.12	3,924	33
12	Size of military <sup>1</sup>	-36.63	$14.47^{**}$	-0.32	$0.09^{***}$	0.79	0.17	0.24	-4.70	4,198	.15

(*Notes.*  $^{\dagger}$ All independent variables lagged one year; standard errors corrected for clustering by country; standard errors and asterisks not shown for control variables: Ethnicity and Population are significant in all models; Past Conflict is not significant in all models.  $^{***}P < 0.01$ ,  $^{**}P < 0.05$ ,  $^{*}P < 0.10$ .

s—and currency held outside banks can be just as easily flowing in reciprocal exchanges. As can be seen in Model 3, CIM (-0.96) is no longer significant once consideration is given for CIE.

#### Oil

As discussed above, opportunity cost models have linked commodity export dependency with armed conflict (Collier and Hoeffler 2005). In light of the fact that nations with market-capitalist economies tend to have comparatively more complex divisions of labor, they tend to consume more commodities and export more secondary and tertiary goods compared with clientelist nations. As a result, the linkage of commodity export dependency with conflict may be spurious: clientelism may partially cause both commodity export dependency and conflict. In fact, market-capitalist nations (where  $CIE_{Binary} = 1$ ) are less likely than clientelist ones to be dependent on oil exports (P < .001). That the oft-noted impact of oil on conflict is spurious is corroborated in Model 4, which shows Oil (0.26) to be insignificant once consideration is given for CIE.

## State Capacity

A popular trend today links weak state capacity as an important factor in the onset of armed conflict (for example, Sobek 2010). Economic norms theory predicts this relationship might be spurious, as market-cap-

italism can cause both peace and increased state capacity as governments create effective bureaucracies to enforce contracts and the rule of law and to promote market growth. In fact, contract-rich nations have an average Relative Political Capacity (Arbetman and Kugler 1998) score above 1 (meaning these states are able to extract more resources than we would expect given their levels of income), while the average for contract-poor nations is below 1 (meaning these states normally extract less than we would otherwise expect), and this difference is significant (P < .001). Model 5 corroborates the expectation that prior reports of *State Capacity* (-0.21) causing conflict are spurious, with CIE the more likely cause of both State Capacity and civil peace.

#### Government Spending

Fjelde and De Soysa (2009:9–10) posit that governments may reduce the risk of civil conflict with spending that promotes redistribution. As discussed above, economic norms theory identifies government spending to create jobs in the market as crucial to state efforts to promote growth in the market, which is demanded by constituents in market-capitalist nations but not demanded by ruling groups in clientelist ones. In fact, the average level of government spending in contract-rich nations is significantly higher than for contract-poor ones (P<.001). This shows that Fjelde and De Soysa's (2009) finding that government expenditure reduces the risk of armed conflict may be spuri-

<sup>&</sup>lt;sup>a</sup>Economic Freedom of the World (Gwartney et al. 2006). Author coding: summary measure of regulation of labor (section 5b) with missing values across years interpolated.

<sup>&</sup>lt;sup>b</sup>Annual change in GDP, percent.<sup>‡</sup>

<sup>&</sup>lt;sup>c</sup>Contract-Intensive Money: ratio of non-currency money to all money (Clague et al. 1999).

<sup>&</sup>lt;sup>d</sup>Oil exports >1/3 of all merchandise exports (Fearon and Laitin 2003).

<sup>&</sup>lt;sup>e</sup>Ratio of taxes to expected taxes (Arbetman and Kugler 1998).

<sup>&</sup>lt;sup>f</sup>Natural log of government expenditure/GDP (World Bank 2007).

<sup>&</sup>lt;sup>8</sup>Called Regulation of Participation by Hegre and Sambanis (2006); the Parreg variable in the Polity IV data set (Marshall and Jaggers 2003).<sup>‡</sup>

<sup>&</sup>lt;sup>h</sup>Dummy equals 1 of Polity2 variable between −5 and 5 in the Polity IV data set (Marshall and Jaggers 2003).

Dummy equals 1 if Polity = 77 or 78 or changed in prior three years (Marshall and Jaggers 2003).

<sup>&</sup>lt;sup>j</sup>Geo1 equals 1 (Hegre and Sambanis 2006).<sup>‡</sup>

<sup>&</sup>lt;sup>k</sup>Whether a neighbor is at war (Sambanis 2004).<sup>‡</sup>

<sup>&</sup>lt;sup>1</sup>Milper/tpop in CINC data (Singer et al. 1972). Construction mimics the Milper variable of Hegre and Sambanis (2006:528); reconstructed here to reduce the number of missing observations.

<sup>&</sup>lt;sup>‡</sup>Obtained from Hegre and Sambanis (2006).)

ous: the path of causation may flow from CIE to both government spending and peace. As can be seen in Model 6, *Government Spending* (-0.12) is insignificant. There appears to be no direct impact of Government Spending on armed conflict, and market-capitalism is the more likely partial cause of government spending and all of its impact on peace.

#### Electoral Regulation

Hegre and Sambanis (2006) confirm the results of most civil war studies that democracy is not a force for peace, but one of its constitutive factors is: *Electoral* Regulation. Just as market-capitalism may be a force for democracy, it may also be a force for electoral regulation, in two ways. First, in the construction of this measure, discounts are assigned to nations where "political groupings tend to form around particular leaders, regional interests, religious or ethnic or clan groups" (Marshall and Jaggers 2003:24-25). As discussed previously, market-capitalist nations are predicted to have fewer of these kinds of political groupings and loyalties. Second, citizens in market-capitalist societies are predicted to demand both the enforcement of equal law and a government that represents these wishes. Since the measure is partly created on observations of coercion in political competition, as well as a weak rule of electoral law, market-capitalist nations are predicted to have higher levels of electoral regulation. In fact, 87% of all contract-rich nation-years have the highest level (5) of Electoral Regulation, while only 9% of contract-poor ones are at this level (P < .001). Model 7 confirms that prior reports of Electoral Regulation (-0.18) promoting peace are spurious, with CIE causing both Electoral Regulation and peace.

## Anocracy

One of the most dependable findings in civil war studies is that nations with anocratic regimes—ones that are neither fully autocratic nor fully democratic—are at comparatively high risk of armed conflict (Hegre, Ellingsen, Gates, and Gleditsch 2001; Mousseau 2001). Economic norms theory predicts market-capitalism to legitimate liberal democracy, so clientelism may be a partial cause of autocratic and anocratic institutions, with the possibility that prior reports of anocracy impacting conflict being spurious. In fact, 93% of all contract-rich nation-years do not have anocratic regimes.<sup>16</sup> In Model 8, Anocracy (0.58) is positive and significant, showing that even if CIE is a partial cause of Anocracy, this factor has a robust impact on conflict in ways that cannot be attributed to clientelist economy.

## Regime Instability

Instability in governing institutions is frequently associated with armed conflict (Hegre et al. 2001; Fea-

ron and Laitin 2003). Economic norms theory informs us that democratization efforts in clientelist economies are fraught with dangers, since in-groups will continue to compete over state rents with implicit or explicit threats of force. Market-capitalist nations, in contrast, should have relatively stable institutions, since there is a widespread consensus on the democratic rule of law and respect for individual rights and freedom. A chisquare test confirms a highly significant (negative) relationship (P < .001) of CIE<sub>Binary</sub> with *Regime Instability*. In Model 9, the coefficient for Regime Instability (1.21) remains significant, indicating that Regime Instability has a robust impact on conflict in ways that cannot be accounted for by clientelist economy.

### Region

One cause of market expansion is having a neighbor with a contract-intensive economy, so it follows that capitalist neighborhoods tend to emerge. However, it is also conceivable that some regions may have less armed conflict than others for reasons that have nothing to do with any known theory, with CIE acting as proxy for it. Preliminary tests confirm that contract-rich nations tend to cluster in Europe and North America and in South and East Asia and Oceania (P < .001), but only the former region, which I call West, has a robust impact on armed conflict. In Model 10, the coefficient for West (-0.11) is not even close to significant. Since this variable is significant without consideration of CIE, Model 10 shows that the clustering of peace in Europe and North America is far more likely a function of market-capitalism than it is some unexplained impact of region.

## Neighbor at War

Since capitalist states do not fight each other (Mousseau 2009) and have been shown here to not have civil wars, clusters of capitalist nations will be peaceful. A difference of means test with the variable *Neighbor at War* confirms that contract-rich nations are significantly more likely than contract-poor ones to have neighbors in peace (P < .001). This indicates that prior reports that having a neighbor at war may increase the risk of conflict (Hegre and Sambanis 2006) may be spurious. In Model 11, *Neighbor at War* (0.45) is positive and significant, indicating that even if CIE is a partial cause of peaceful neighbors, this factor has a robust impact on conflict in ways that cannot be attributed to contract-poor economy.

## Size of Military

Hegre and Sambanis (2006) have shown that the *Size* of *Military* is a robust factor in civil conflict studies, which may reflect a state's capacity to rule its population. In market-capitalist societies, citizens demand that their states enforce the law, which could mean, ceteris paribus, that market-capitalist nations have larger militaries than contract-poor ones. In fact, the average Size of Military in the contract-rich nations is significantly higher than for contract-poor ones

<sup>&</sup>lt;sup>16</sup> As predicted by economic norms theory, almost all of the non-democratic contract-rich nation-years in the data transitioned to full democracy during the period observed.

(P < .001). In Model 12, the coefficient for Size of Military (-36.63) remains significant, indicating that it has a robust impact on conflict in ways that cannot be accounted for by contract-poor economy.

Analyses of Wars yield similar results as found in Table 2, and further tests of the surviving variables put together in common models, not shown due to space constraints, yield only three variables that are significant and robust in analyses of both Wars and Armed Conflicts: CIE, Economic Growth, and Regime Instability. In analyses of Wars, Anocracy is also significant. In both cases, CIE is the most robust factor of all, including the control variables: a change from the most war-prone to least war-prone decile of CIE results in a 75% reduction in the risk of Armed Conflict and a whopping 93% reduction in the risk of War (with all other factors set at their most conflictprone deciles and dummies at their most conflictprone positions). These impacts tower over the impacts of Economic Growth (respectively, 40% and 51%), Regime Instability (respectively, 60% and 50%), and (for wars) Anocracy (45%) and are conservative estimates, since some of the impact of CIE is not shown due to the presence of endogenous variables Economic Growth, Regime Instability, and (for wars) Anocracy. The analyses clearly show that market-capitalism is a highly robust and powerful force for peace within nations, and, once considered, most other known factors in the study of civil conflict are spurious.

## **Implications and Conclusion**

While the correlations of liberal preferences with economic development, civil peace, and democracy are among the most powerful and longstanding observations in the study of politics (Dixon 2009:723), the field lacks any widely considered fully encompassing theory for these phenomena; moreover, there is no existing consensus for an explanation for any of these patterns separately. This study showed how a particular kind of economic development, market-capitalism, can offer a single account for all of these patterns. In societies with contract-rich economies, almost everyone has free choice in employers and regularly obtains goods and services from strangers located in a market. Due to everyone having greater opportunities to contract when everyone else has greater opportunities to contract, individuals in these societies have direct economic interests in each other's rights (to contract) and welfare. Furthermore, they have interests in their states producing the public goods of law and order, reliably and impartially enforcing contracts, and doing whatever it takes to promote market growth. As a consequence, market-capitalist nations tend to be democratic with strong and functional states, while having advanced economies.

Prior studies have confirmed the predicted linkages of market-capitalism with liberal preferences (Mousseau 2009:61), human rights (Mousseau and Mousseau 2008), and global conflict and cooperation (Mousseau 2003, 2009). Herein, we saw that market-capitalism Granger-causes higher income in nations, and higher

incomes do not Granger-cause market-capitalism. Analyses of armed conflict in most nations from 1961 to 2001 showed that not a single civil war, insurgency, or rebellion occurred in any nation with a market-capitalist economy. This result is highly unlikely to be the result of chance and, after controlling for every known robust variable in civil war studies, market-capitalism emerged as the most powerful explanatory factor in the field, by a large margin. In addition, many leading prior variables in the civil conflict literature are spurious, including economic development, state capacoil-export dependency, economic freedom, contract-intensive money, government spending, electoral regulation, and Western. After extensive tests, only two other variables, Economic Growth and Regime Instability, can be said with confidence to influence the odds of both armed conflict and civil wars in nations.

Causation is never shown directly in any study, and it is possible that the powerful linkage of market-capitalism with peace uncovered here may have a different explanation—possibly one not to be known in our lifetimes. It is also possible that the empirical results are a function of measurement or data error or that a third factor may account for both market-capitalism and peace. While we must always remain skeptical in our research, we must also assess the validity of all explanations by comparing them against all available competing explanations. Serious scholars will recognize not only the comparatively strong predictive track record of economic norms theory, but its unparalleled leverage in explaining a lot with a little. The theory identifies some possible microlevel roots of liberal culture, shows how market-capitalism and the democratic rule of law may be based on common values and institutions, and offers an explanation for why market-capitalism, once rooted, endures and expands, explaining in turn the democracy and development puzzle. While everyone wants profits, those with market norms are more likely than those without them to pursue profits in the market rather than in crime or politics, thus demanding rights, equal law, tolerance, and market

For anyone interested in promoting peace and prosperity within and among nations, several novel policy implications follow. In contrast to the property rights tradition (Clague et al. 1999), the state enforcement of contracts is not sufficient for promoting economic growth and political stability: citizens must also be able to find jobs in the market. In contrast to the neoclassical liberal tradition (Friedman 1970), freer markets do not always create jobs: states must often intervene in the economy to create and sustain equal opportunities in the market. When geographic fortunes or government policies cause the market to offer greater opportunities than in-groups, a society's economic norms change. With recognition of bounded rationality, we can see how, as Joseph Schumpeter observed a half century ago, with capitalist development people are "democratized, individualized, and rationalized" (Schumpeter 1955:66), and the resort to arms against others playing by the rules becomes unthinkable.

## References

- Arbetman, Marina, and Jacek Kugler Eds. (1998) *Political Capacity* and *Economic Behavior*. Boulder, CO: Westview Press.
- Beck, Thorsten, and Ian Webb. (2003) Economic, Demographic, and Institutional Determinants of Life Insurance Consumption across Countries. *The World Bank Economic Review* 17 (1): 51–88.
- BLALOCK, HUBERT M. Jr. (1979) Social Statistics, 2nd edn. New York, NY: McGraw-Hill.
- Braudel, Fernand. (1982) Civilization and Market-capitalism, 15th—18th Century. Volume II: The Wheels of Commerce. *Translated by Siân Reynolds*. New York: Harper & Row.
- CLAGUE, CHRISTOPHER, PHILIP KEEFER, STEPHEN KNACK, AND MAN-CUR OLSON. (1999) Contract-Intensive Money: Contract Enforcement, Property Rights, and Economic Performance. Journal of Economic Growth 4 (2): 185–211.
- Collier, Paul, and Anke Hoeffler. (2005) Resource Rents, Governance, and Conflict. *Journal of Conflict Resolution* 49 (4): 625–633.
- De Soysa, Indra, and Hanne Fjelde. (2010) Is the Hidden Hand an Iron Fist? Capitalism and Civil Peace, 1970–2005. *Journal of Peace Research* 47: 287.
- DE SOYSA, INDRA, AND ERIC NEUMAYER. (2007) Resource Wealth and the Risk of Civil War Onset: Results from a New Dataset of Natural Resource Rents, 1970–1999. *Conflict Management and Peace Science* 24 (3): 201–218.
- DIXON, JEFFREY. (2009) What Causes Civil Wars? Integrating Quantitative Research Findings. *International Studies Review* 11: 707–735.
- EISENSTADT, SHMUEL N., AND LUIS RONIGER. (1984) Patrons, Clients and Friends. Cambridge, UK: Cambridge University Press.
- Euromonitor. (2003) Global Market Information Database. Available at http://www.euromonitor.com/databases.aspx.
- Fearon, James D. (2005) Primary Commodity Exports and Civil War. *Journal of Conflict Resolution* 49 (4): 483–507.
- Fearon, James D., and David Laitin. (2003) Ethnicity, Insurgency, and Civil War. American Political Science Review 97 (1): 75–89.
- FJELDE, HANNE, AND INDRA DE SOYSA. (2009) Coercion, Co-optation, or Cooperation? State Capacity and the Risk of Civil War, 1961–2004. Conflict Management and Peace Science 26 (5): 5–25.
- Freeman, John. (1983) Granger Causality and the Times Series Analysis of Political Relationships. *American Journal of Political Science* 27 (2): 327–358.
- FRIEDMAN, MILTON. (1970) Capitalism and Freedom. Chicago, IL: University of Chicago.
- GLEDITSCH, KRISTIAN S. (2002) Expanded Trade and GDP Data. Journal of Conflict Resolution 46 (5): 712–725.
- GLEDITSCH, NILS P., PETER WALLENSTEEN, MIKAEL ERIKSSON, MARGARETA SOLLENBERG, AND HAVARD STRAND. (2002) Armed Conflict 1946–2001: A New Dataset. *Journal of Peace Research* 39 (5): 615–638.
- Gurr, Ted R. (1970) Why Men Rebel. Princeton, NJ: Princeton University Press.
- GWARTNEY, JAMES, ROBERT LAWSON, AND WITH William EASTERLY. (2006) Economic Freedom of the World: 2006 Annual Report. Vancouver, BC: The Fraser Institute.
- Hegre, Havard, and Nicholas Sambanis. (2006) Sensitivity Analysis of Empirical Results on Civil War Onset. *Journal of Conflict Resolution* 50 (4): 508–535.
- HEGRE, HAVARD, TANYA ELLINGSEN, SCOTT GATES, AND NILS P. GLEDITSCH. (2001) Toward a Democratic Civil Peace? Democracy, Political Change, and Civil War, 1816–1992. *American Political Science Review* 95 (1): 33–48.
- HESTON, ALAN, ROBERT SUMMERS, AND BETTINA ATEN. (2002) *Penn World Table Version 6.1*. Center for International Comparisons at the University of Pennsylvania.
- INGLEHART, RONALD, AND WAYNE E. BAKER. (2000) Modernization, Cultural Change, and the Persistence of Traditional Values. American Sociological Review 65 (1): 19–52.

- INKELES, ALEX, AND DAVID H. SMITH. (1974) Becoming Modern: Individual Change in Six Developing Countries. Cambridge, MA: Harvard University Press.
- KANT, IMMANUEL ([1795]1939) Perpetual Peace Translated and edited by Nicholas Murray Butler. New York, NY: Columbia University Press.
- KAUFMANN, DANIEL, AART KRAAY, AND MASSIMO MASTRUZZI. (2010) The Worldwide Governance Indicators: A Summary of Methodology, Data and Analytical Issues. World Bank Policy Research Working Paper No. 5430.
- KING, GARY, JAMES HONAKER, ANNE JOSEPH, AND KENNETH SCHEVE. (2001) Analyzing Incomplete Political Science Data: An Alternative Algorithm for Multiple Imputation. American Political Science Review 95 (1): 49–69.
- LICHBACH, MARK I. (1989) An Evaluation of "Does Inequality Breed Political Conflict?" Studies. World Politics 41 (4): 431–470.
- LIPSET, SEYMORE M. (1959) Some Social Requisites of Democracy: Economic Development and Political Legitimacy. American Political Science Review 53 (1): 69–105.
- MARSHALL, MONTY G., AND KEITH JAGGERS. (2003) POLITY IV PROJECT: Political Regime Characteristics and Transitions, 1800–2002, Dataset Users' Manual. Center for International Development and Conflict Management, University of Maryland, College Park and Colorado State University.
- MAUSS, MARCEL. ([1924] 2000) Gift: The Form & Reason for Exchange in Archaic Societies. New York, NY: W. W. Norton & Company.
- Mousseau, Demet Y. (2001) Democratizing with Ethnic Divisions: A Source of Conflict? *Journal of Peace Research* 38 (5): 547–568.
- MOUSSEAU, MICHAEL. (2000) Market Prosperity, Democratic Consolidation, and Democratic Peace. Journal of Conflict Resolution 44 (4): 472–507.
- MOUSSEAU, MICHAEL. (2002–2003) Market Civilization and its Clash with Terror. *International Security* 27 (3): 5–29.
- MOUSSEAU, MICHAEL. (2003) The Nexus of Market Society, Liberal Preferences, and Democratic Peace: Interdisciplinary Theory and Evidence. *International Studies Quarterly* 47 (4): 483–510.
- MOUSSEAU, MICHAEL. (2009) The Social Market Roots of Democratic Peace. *International Security* 33 (4): 52–86.
- MOUSSEAU, MICHAEL. (2010) Coming to Terms with the Capitalist Peace. *International Interactions* 36 (2): 185–192.
- Mousseau, Michael, and Demet Y. Mousseau. (2008) The Contracting Roots of Human Rights. *Journal of Peace Research* 45 (3): 327–344.
- Nelli, Humbert O. (1972) The Earliest Insurance Contract: A New Discovery. *The Journal of Risk and Insurance* 39 (2): 215–220.
- NORTH, DOUGLAS C., JOHN J. WALLIS, AND BARRY R. WEINGAST. (2009) Violence and Social Orders: A Conceptual Framework for Interpreting Recorded Human History. New York: Cambridge University Press.
- Parsons, Talcott. (1964) Evolutionary Universals in Society. *American Sociological Review* 29 (3): 339–357.
- POLANYI, KARL. ([1944] 1957) The Great Transformation: The Political and Economic Origins of Our Time. Boston: Beacon Press.
- PREBISCH, RAUL. (1950) The Economic Development of Latin America and Its Principal Problem. New York: United Nations.
- RAKNERUD, ARVID, AND HAVARD HEGRE. (1997) The Hazard of War: Reassessing the Evidence for the Democratic Peace. *Journal of Peace Research* 34 (4): 385–404.
- RAY, JAMES L. (2003) Explaining Interstate Conflict and War: What Should Be Controlled For? Conflict Management and Peace Science 20 (2): 1–31.
- REGAN, PATRICK M., AND DANIEL NORTON. (2005) Greed, Grievance, and Mobilization in Civil Wars. *Journal of Conflict Resolution* 49 (3): 319–336.
- ROSTOW, WALT W. (1960) The Stages of Economic Growth. London, UK: Cambridge University Press.
- SAMBANIS, NICHOLAS. (2004) What Is a Civil War? Conceptual and Empirical Complexities of an Operational Definition. *Journal of Conflict Resolution* 48 (6): 814–858.

- Schumpeter, Joseph. (1955) Imperialism; Social Classes: Two Essays. Translated by Heinz Norden. New York: Meridian Books.
- Simon, Herbert. (1955) A Behavioral Model of Rational Choice. The Quarterly Journal of Economics 69: 99–118.
- Singer, J. David, Stuart A. Bremer, and John Stuckey. (1972) Capability Distribution, Uncertainty, and Major Power War, 1820–1965. In *Peace, War, and Numbers*, edited by Bruce Russett. Beverly Hills, CA: Sage.
- SOBEK, DAVID. (2010) Masters of Their Domains: The Role of State Capacity in Civil Wars. *Journal of Peace Research* 47 (3): 267–271.
- Wallerstein, Immanuel. (1974) The Rise and Future Demise of the World Capitalist System. *Comparative Studies in Society and History* 16 (4): 387–415.
- Weede, Erich. (2009) Geopolitics, Economic Freedom and Growth in China and the West. *Pacific Focus* 24 (2): 131–160.
- Wood, Gordon S. (1998) *The Creation of the American Republic*, 1776–1787. Chapel Hill, NC: University of North Carolina Press.
- WORLD BANK. (2007) World Development Indicators. Washington, DC: World Bank.