The Quarterly Review of Economics and Finance 50 (2010) 146–156

Contents lists available at ScienceDirect

The Quarterly Review of Economics and Finance

journal homepage: www.elsevier.com/locate/qref

Asset values and the sustainability of peace prospects

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ARTICLE INFO

Article history:
Received 27 October 2008
Received in revised form 8 November 2009
Accepted 14 December 2009
Available online 23 December 2009

JEL classification:
D74
F53

Keywords:
Capital markets
Sustainable peace
Sri Lanka

ABSTRACT

Continuous violent conflict is a central cause of economic stagnation in many of the world's poorest countries. Given that attempts to achieve peace in these countries often remain elusive, it is important to identify mechanisms which reveal the sustainability of peace over time. We argue that long-term financial asset values reflect the sustainability of peace prospects because the expectation of continued peace will result in higher long-term asset prices. Equity index prices from Sri Lanka are used to test this theory. Also considered are the accuracy of equity prices versus other predictors of sustainable peace, including exchange rates and survey responses. The main conclusion is that long-term financial asset prices indicate the likelihood of conflict or peace and can inform policies as they relate to conflict-torn areas.

1. Introduction

Internal violence is a central cause of continued economic stagnation in many of the world's poorest countries. As Collier (2007, p. 18) notes, many of these countries "are stuck in a pattern of violent internal challenges to government," which "...can trap a country in poverty." Understanding the causes of this conflict trap and potential solutions is a central policy issue. In many cases attempts to achieve sustained peace have remained elusive. Consider, for instance, the attempts to negotiate peace in Rwanda, Sierra Leone, Sri Lanka, Somalia, and Angola in the 1990s. In each case the inability to get the relevant parties to commit to peace resulted in the onset and escalation of conflict. When peace is unsustainable, the costs are significant, as illustrated by the case of Rwanda where over 800,000 people died following the collapse of a negotiated peace agreement.

In cases of long-term conflict, obtaining initial peace is a necessary, but not sufficient, condition for breaking free of the conflict trap. Also important is ensuring that peace is sustainable, meaning that it will persist over time. Determining the sustainability of peace prospects is important for citizens who, as Rwanda illustrates, often incur the costs of conflict. Gauging the sustainability of peace is also important for an array of international actors (e.g., international organizations, governments, non-government organizations, etc.) because decisions have to be made regarding the type and level of resources (e.g., monetary and humanitarian aid, negotiators, troops and peacekeepers, etc.) invested in conflict-torn areas. Given this, a central issue is the identification of mechanisms which reveal the sustainability of peace.

It is our contention that long-term asset prices reflect the expectation of sustained peace or continued conflict. In the case of an ongoing conflict, asset prices may reflect different influences, including the prospects, or changes in the prospects, of one side or the other winning the conflict outright, or the likelihood of parties involved in conflict delivering on commitments to peace.[1] Given this, our central thesis is that long-term financial asset prices accurately reflect the confidence of investors in the stability of institutions and can therefore be used as an indicator of the perceived sustainability of peace.

Abbreviations: ASPI, All Share Price Index; CFA, ceasefire agreement; CSE, Colombo Stock Exchange; GARCH, Generalized Autoregressive Conditional Heteroskedasticity; ISGA, Interim Self-Governing Authority; JHU, National Heritage Party; JVP, People's Liberation Front; LTTE, Liberation Tigers of Tamil Eelam; MPI, Milanka Price Index; PCI, Peace Confidence Index; SLFP, Sri Lanka Freedom Party; TULF, Tamil United Liberation Front; UNP, United National Party.

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[1] We are grateful to an anonymous referee for brining this point to our attention.

1062-9769/$ – see front matter
doi:10.1016/j.qref.2009.12.002

If peace is not sustainable, meaning that conflict will continue in the future, investors will change their expectations regarding institutional stability leading to a fall in long-term asset prices. Similarly, if peace prospects are viewed as sustainable, indicating continued peace and institutional stability, this will result in an increase in long-term asset prices. Since long-term financial asset prices can be used to predict the sustainability of peace, they can play an important role in informing policies toward conflict-torn areas.

Our contribution is twofold. First, we build on an existing literature which establishes asset prices as indicators of expectations. To date, this literature has mainly used financial asset prices to interpret and understand historical events. We extend this reasoning to ongoing conflicts and, in so doing, provide a specific, forward-looking mechanism that can be used to gauge the sustainability of peace over time. By establishing a link between economic variables and the sustainability of peace, we identify a tool that can be utilized to inform policy decisions. For example, this knowledge could allow governments and international agencies to reallocate resources (e.g., troops, humanitarian aid, etc.) if peace is expected to be unsustainable. Second, we provide insight into which indicator best predicts the sustainability of peace by analyzing and comparing long-term asset prices, exchange rates, and survey responses.

In order to test our general thesis regarding the effectiveness of long-term financial assets as indicators of the sustainability of peace, we analyze the long-running and, until recently, seemingly intractable conflict in Sri Lanka.[2] Sri Lanka provides an interesting test case for our hypothesis given that it has been characterized by ongoing conflict for several decades. Further, the government and rebel parties have entered into numerous peace agreements only to have them unravel in a relatively short period of time, meaning that peace was unsustainable. Given this, Sri Lanka provides a natural experiment to test our general thesis. Our thesis indicates that where peace prospects are not sustainable, long-term asset markets should respond with lower values. Similarly, where peace is sustainable, long-term asset markets should respond with higher values. In the case of Sri Lanka, we analyze asset values prior to the breakdown of peace to see if this is indeed the case. Our analysis indicates that the asset price variable captures the prospect that conflict would end soon and that the government would not lose.

Within the context of the Sri Lankan conflict we also consider the accuracy of long-term financial assets versus alternative indicators such as exchange rates and survey data. We conclude that long-term financial assets are better indicators of the sustainability of peace as compared to other alternatives. Intuitively, this finding makes sense. Surveys can suffer from issues of accuracy and objectivity and are often lagging indicators of the persistence of peace. Short-term financial assets can suffer from sensitivity to short-term factors. Stock markets overcome these problems and therefore provide the best indication of the sustainability of peace.

Our analysis proceeds as follows. The next section provides an overview of the literature that establishes the use of economic variables as indicators of expectations. Section 3 discusses the empirical strategy for testing our thesis. Section 4 consists of an overview of the Sri Lankan conflict, as well as our empirical results. Section 5 provides an analysis of our results in the historical context of conflict in Sri Lanka. The section also considers the effectiveness of long-term financial assets relative to other potential indicators of the sustainability of peace, such as short-term exchange rates and survey responses. Section 6 concludes with the implications of our analysis.

[2] In May 2009, the Sri Lankan military defeated the main rebel group, the Liberation Tigers of Tamil Eelam (LTTE).

2. Asset prices, expectations, and sustainability

The realization that expectations regarding future occurrences influence current economic outcomes has a long history, as is evident in the work of Beveridge (1909), Pigou (1920) and Keynes (1936). Following Muth (1961), who first used the term 'rational expectations,' the systematic study of expectations began with the 'rational expectations revolution' in the 1970s. Lucas (1972, 1976) operationalized the concept in macroeconomic models and Sargent and Wallace (1973, 1975) extended the logic of rational expectations to monetary policy demonstrating the limitations of government policy in this regard. In its simplest form, the concept of rational expectations holds that outcomes will not differ systematically from what individuals expect those outcomes to be. The concept has been applied to a wide variety of topics including the efficient markets theory of asset prices, the design and implications of government stabilization policies, the concept of tax smoothing, and the dynamics of inflation and hyperinflation.

To the extent asset prices capture the expectations of economic actors they can be used as predictors of changes in economic, political and social institutions. In their analysis of the Glorious Revolution, North and Weingast (1989, p. 819) capture this sentiment when they note that, "since capital markets are especially sensitive to the security of property rights, they provide a unique and highly visible indicator of the economic and political revolution that took place". What North and Weingast are emphasizing is that the capital markets reflect the expectations of investors regarding the stability of institutions. This logic has been applied to the analysis of numerous historical events.

Wells and Wills (2000) provide an empirical test of North and Weingast (1989) to analyze the impact of political and economic events on financial markets. Specifically, they analyze the impact of institutional changes caused by the Glorious Revolution on English capital markets. The logic underlying their analysis is that assets will be re-priced depending on investor expectations about the future stability and security of institutions. Threats to institutional stability are reflected by downturns in capital markets while improvements in institutional quality will lead to upturns in capital markets. Wells and Wills conclude that capital markets accurately reflect the expected stability of institutions and note that, "the markets themselves, though caught here in their infancy, seem to have been remarkably capable of reacting in the appropriate direction when events threatened or supported their underlying values" (2000, pp. 439–440). This is an important point, because it indicates that even relatively young capital markets reflect the expectations of citizens and investors.

McCandless (1996), building on the earlier work of Mitchell (1903), explores the hypothesis that expectations of future government behavior during the Civil War were a major factor in determining the price of gold. Specifically, he contends that news regarding the war was a key predictor of future government behavior. In order to test his hypothesis, McCandless compares the prices of gold in the North to the price of gold in the South. If expectations are rational, the price of gold in the two regions should move in opposite directions. This is because a war related event that was positive for the North (reflected in an increase of gold prices) was bad for the South (reflected in a decrease of gold prices) and vice versa. This expected outcome is precisely what McCandless finds. He concludes that "the demonstration that currency prices do respond predictably to events other than actual money supply changes and the notion that the driving force behind these changes are expectations are important lessons for periods of peace as well as those of war" (McCandless, 1996, p. 668).

Finally, Sobel (1998) analyzes the effectiveness of United Nations interventions through their impact on exchange rates. The