9 Effectiveness of Transnational Partnership Regimes in Long-Term Resource Revenue Management

Jamie Fraser and Gilles Carbonnier

Introduction

The Extractive Industries Transparency Initiative (EITI) is a transnational multistakeholder regime that governs transparency and accountability in the extractives sector. Its aim is to develop a global standard for transparency in the operations and governance of the extractives sector, particularly in resource-rich developing countries. At its core, the EITI is a system of accountability wherein monetary transfers are reported by both state entities and extractive industries and further reconciled by an independent auditor. In-country implementation is developed and overseen by a multi-stakeholder group that includes representatives from government, industry and civil society. Since there is no unique formula for how countries must achieve EITI transparency targets, operating structures and mechanisms vary widely between implementing countries. These transparency targets are evaluated on a case-by-case basis by the EITI international Secretariat based in Oslo. Once the Secretariat determines that sufficient accountability mechanisms have been put in place, it certifies the country as "EITI Compliant."

Variations between EITI implementing countries make it challenging to evaluate the effectiveness of such a multi-stakeholder partnership. Selected studies have shown that, in some cases, the EITI has contributed to reducing corruption and improving overall trust in the way extractive resources are governed (Villar and Papyrakis 2017), sometimes helping to increase foreign investment (Öge 2016a; Malden 2017; Schmaljohann 2013). Other evaluations have concluded that the EITI has no effect on the political or economic systems of the implementing countries (Kasekende et al 2016; Sovacool and Andrews 2015; Sovacool et al. 2016).

In this chapter, we approach EITI effectiveness through the fifth pathway of the analytical framework introduced in Chapter 1, while acknowledging that the different pathways to effectiveness described there can be seen as strongly interrelated. In particular, we argue that the effectiveness of EITI membership can be largely equated with its ability to effect change in institutions outside the partnership, with the ultimate goal of reducing or eliminating corruption and illicit financial flows within the extractives industry (i.e., overall problem-solving effectiveness). Specifically, this study examines the effect of EITI membership on the price of sovereign debt, which is a measure of how investor expectations are influenced by

EITI membership. This is an important way to analyze the effectiveness of EITI as a multi-stakeholder regime because it indicates whether the commitments a country makes under EITI are perceived as material and credible or not. In order to achieve its stated objectives (i.e., goal-attainment effectiveness), EITI implementation must enable structural reforms in economic and political institutions and allow for the creation of oversight structures that promote transparency with the participation of industry, government and civil society. The credibility of such commitments within a country should, in theory, influence external institutions such as sovereign debt arrangements and the expectations of investors.

We first present and discuss the results of an econometric analysis of EITI effectiveness that uncovers the pathways through which investor confidence is impacted by EITI membership. We then examine EITI implementation and its interaction with country-specific institutional dynamics through two case studies: Indonesia and Senegal.

Background

Many studies describe how resource-dependent states can effectively manage resource wealth to stabilize their economy, diversify their economy and reduce resource reliance. However, the specific contributions of multi-stakeholder partnership regimes in the extractive sector are under-researched. The so-called "resource curse" phenomenon has been amply studied. Resource dependence can damage an economy's development due to the price volatility of natural resources (Van der Ploeg and Poelhekke 2009; Zhang et al. 2015) and the increased risk of corruption and exploitation of resource revenues. Resource dependence sets up a trade-off between the economic benefits of diversification and the political disincentive to redistribute power away from the political center (Dunning 2005). However, there is evidence that a single institutional solution is not suitable for all cases (Gelb et al. 2002). In states where institutions are weak and unable to enforce checks on spending or ownership laws, revenues from resource extraction are vulnerable to exploitation by interest groups and patronage networks (Tornell and Lane 1999); used to maintain authority over the population through economic dependence (Weinthal and Luong 2006); or mismanaged by authorities to serve their own political interests (Frankel 2012; Carbonnier 2013).

Evidence suggests that taking natural resource assets out of state control (Weinthal and Luong 2006) or developing policy networks (Orihuela 2013) can reduce corruption and foster the development of stronger institutions. Multistakeholder partnership regimes, such as the EITI, attempt to catalyze or augment this process. However, the literature on the effectiveness of EITI has produced mixed results. Some case studies have demonstrated that EITI membership increases transparency (Öge 2016b; Sovacool and Andrews 2015) and decreases corruption (Villar and Papyrakis 2017), while other studies have found the opposite (Kasekende et al 2016; Ocheje 2006; Sovacool et al 2016). There is also evidence that EITI compliance attracts investment (David-Barrett and Okamura 2013; Malden 2017; Schmaljohann 2013) and has a positive impact on economic development (Corrigan 2017). However, the positive effect of the EITI on improving transparency may be caused by other underlying factors, such as the strength of civil society to enforce government commitments to begin with (Furstenberg 2015; Öge 2017).

This study contributes to the literature on EITI effectiveness by performing a systematic analysis of how EITI implementation is viewed by investors. The EITI can be viewed as a mechanism through which governments commit to transparent resource management over the long run. Thus, investor expectations on EITI outcomes in an implementing country can indicate whether this commitment from the government to transparent resource revenue management is seen as credible.

Operationalization

This paper proposes that the effectiveness of EITI can be assessed through the lens of investor expectations on transparent resource revenue management. Greater transparency and accountability in the extractives sector as a mechanism for reducing corruption is the primary goal of the EITI. Better resource revenue management can lead to greater public investment and thus increase economic growth. If membership in EITI is viewed as a credible commitment to effective resource revenue management, then markets will lower the price of sovereign debt, signaling a less risky investment.

Data

Data availability presents a significant challenge for this study. Only 59 countries have participated in the EITI since its founding in 2002. Fewer still have economic systems that are robust enough to be able to channel investor expectations effectively. Most notably, only 36 EITI-affiliated countries issue publicly traded sovereign debt, the market mechanism through which investor expectations can be analyzed. The full list of EITI-affiliated countries for which data on publicly traded sovereign debt is available can be found in Table 9.1.

We constructed a timeline of EITI membership status for each EITI-affiliated country. Countries are listed as "EITI Candidate" countries upon the announcement that the government intends to adopt the EITI principles. As of 2019, 30 of the 59 EITI-affiliated countries had succeeded in implementing all of the EITI guiding principles and have been listed as "EITI Compliant" by the secretariat, 14 of which are included in our sample. Seventeen countries had at some point been suspended, and six had withdrawn from the EITI altogether.¹ Data on the time-line of membership for each country was compiled from media announcements and documents available on the EITI website (Extractive Industry Transparency Initiative 2019). The study also uses complementary data on GDP growth rates (World Bank Indicators 2019a), inflation rates (World Bank Indicators 2020), the global volatility index (Thomson Reuters DataStream 2019) and a measure of institutional durability (Center for Systemic Peace 2019) to further examine how intervening factors could influence the relationship between EITI membership

Country	Date of EITI Candidacy Announcement	Country	Date of EITI Candidacy Announcement
Armenia	3 September 2017	Mongolia	27 September 2007
Azerbaijan	27 September 2007	Mozambique	15 May 2009
Colombia	15 October 2014	Nigeria	27 September 2007
Cote d'Ivoire	12 May 2008	Papua New Guinea	19 March 2014
Dominican Republic	23 February 2016	Peru	27 September 2007
Ethiopia	19 March 2014	Philippines	22 May 2013
Gabon	27 September 2007	Senegal	17 October 2013
Ghana	27 September 2007	Seychelles	6 August 2014
Guatemala	1 March 2011	Suriname	23 May 2017
Honduras	22 May 2013	Tajikistan	26 February 2013
Indonesia	19 October 2010	Tanzania	12 February 2009
Iraq	10 February 2010	Trinidad and Tobago	1 March 2011
Kazakhstan	27 September 2007	Ukraine	17 October 2013
Mexico	25 October 2017	Zambia	15 May 2009

Table 9.1 EITI-affiliated countries, with available sovereign debt data

Source: Authors, based on Extractive Industry Transparency Initiative (2019).

and investor expectations of a government's credibility to manage resource revenues in the long term

Panel-Level Granger Causality

We first use a Granger causality model to determine if there is a statistically significant relationship between a change in the country's EITI membership status and the price of its sovereign debt. EITI membership status is defined as a sequence of events beginning with the announcement of EITI candidacy and then full membership if approved. We also include suspension of membership or exit from the EITI if applicable. The event timeline is formatted as an ordinal variable, with possible values of one to five, where each value denotes a membership status. Thus, interpretation of the results will allow us to determine if there is a significant relationship between stages of EITI membership status and the price of sovereign debt.

Granger causality is a type of econometric analysis that can determine with a specified degree of confidence that "Event A" precedes "Event B." In this case, Event A is a change in EITI membership status and Event B is a change in the price of sovereign debt. This analysis allows us to determine if there is a statistically significant likelihood that changes in EITI membership status systematically precede changes in the price of sovereign debt. While this will not establish direct causality, it allows us to explore different possibilities for a relationship between the two variables.

We augment the model to test for the effect of three additional variables that could intervene in the relationship between EITI membership and the price of sovereign debt. First, to test if debt burden has an effect on the relationship between the price of sovereign debt and EITI membership status, we include a variable denoting the amount of World Bank debt a country holds (World Bank Indicators 2019b). Second, we include a measure denoting the percentage of GDP derived from natural resource rents (World Bank Indicators 2019c) to account for the possibility that investor expectations are weighted by how reliant a country is on extractives revenues. Finally, we test if corruption perception influences the relationship between investor expectations and EITI membership status in adopting countries (Transparency International 2019).

Country-Level Granger Causality

Country-level Granger causality analyses are used to allow for the possibility that the relationship between the price of sovereign debt and EITI membership fluctuates depending on country-specific factors. There is a possibility that different directions of causality in each country may interfere with the panel-level results. This allows us to account for this possibility and analyze each country individually. We perform the Granger causality analysis on each EITI-affiliated country listed in Table 9.1 individually.

Event Study

Finally, an event study methodology is used to test if there is an abnormal variation in the price of sovereign debt against a baseline index around the date that EITI candidacy is announced. Adapting from Campbell et al (1997), abnormal movement around the event date is defined as

$$\varepsilon_{it}^* = R_{it} - E[R_{it} \mid X_t]$$
(9.1)

$$y_{it} = Year_t + \varepsilon_{it}^* \tag{9.2}$$

Where ε_{it}^* is the abnormal return for index *i* at time *t*, R_{it} is the observed return of index *i* at time *t* and $E[R_{it} | X_t]$ is the expected return of index *i* at time *t* given the benchmark return X_i . Time *t* is the event window, which is defined as the number of days before and after the date of candidacy announcement. Here, the baseline index used is the Bloomberg Emerging Markets global index, obtained from the Thomson Reuters (2019) DataStream database. While the analysis does not conclusively prove that the announcement of EITI candidacy causes the abnormal returns, it indicates whether the events occurring around the timeframe studied are somehow disturbing the market for sovereign debt, beyond what would normally be expected. Here, an abnormal return is mathematically defined as a return greater than one standard deviation above or below what would normally be expected over a given window of time around the date of EITI candidacy announcement.

Results

Panel-Level Granger Causality

Results of the panel-level Granger causality tests, shown in Table 9.2, demonstrate that there is no significant systematic relationship between changes in EITI membership status and the price of sovereign debt in either direction of causality. This holds true even when the intervening variables of interest are taken into account, which hints to the fact that investors do not expect EITI status to significantly alter governments' behavior.

This indicates that investors may not view the EITI as a sufficiently effective commitment to alter economic and political institutions to the extent that it influences investor confidence regarding the way resource revenue will be managed and how this, in turn, will impact solvency risks.

Country-Level Granger Causality

As with the panel-level analysis, when we run the Granger causality test on each country individually, there does not appear to be any significant relationship between EITI membership and the price of sovereign debt. Again, the results do not provide any evidence of a significant relationship between EITI membership and investor expectations on how improved resource revenue management might alter sovereign debt risk (Table 9.3).

Equation	Variable Tested	Original Specification	+Debt Burden	+Resource Rents	+Corruption
Spread	Timeline	0.3229	0.3191	0.3352	0.3477
Inflation	Timeline	0.9619	0.9428	0.9897	0.9256
Additional	Timeline	-	0.7573	0.8875	0.7343
GDP Growth	Timeline	0.8153	0.8276	0.8247	0.8265
Institutions	Timeline	0.918	0.9958	0.9744	0.9969
Volatility	Timeline	0.3939	0.3733	0.1871	0.4041
Timeline	Spread	0.6110	0.5835	0.6134	0.5858
Timeline	Inflation	0.1906	0.1847	0.1946	0.1837
Timeline	GDP Growth	0.9449	0.9424	0.9226	0.9471
Timeline	Volatility	0.0782*	0.0678	0.1655	0.0722*
Timeline	Institutions	0.9600	0.9596	0.9909	0.9564
Timeline	Additional	-	-	0.9620	0.6876
Timeline	All	0.4649	0.4316	0.7488	0.5387

Table 9.2 Panel-level Granger causality, effect of EITI membership on the spread of the default sovereign debt

Source: Authors.

*=Significant at 90% confidence

Variable Tested	Original Specification	+Debt Burden	+Resource Rents	+Corruption
Timeline	-	-	-	-
Additional	-	-	-	Mexico, Ukraine
Institutions	-	-	-	-
Volatility	Peru	Peru	-	Gabon
Inflation	-	-	-	-
GDP Growth	-	-	-	-
ALL	-	-	-	Mexico

Table 9.3 Country-level Granger causality

Source: Authors.

Event Study

As detailed in the methodology section, the purpose of the event study is to determine if there is significant deviation in how the price of sovereign debt is affected by the announcement of EITI candidacy as compared to what would be expected without any announcement. Only 12 countries could be included in this analysis due to lack of available bond data over a time period of sufficient length before joining the EITI (Armenia, Colombia, Dominican Republic, Honduras, Indonesia, Iraq, Mexico, Peru, the Philippines, Senegal and the Seychelles). The event study analysis shows that an announcement of EITI candidacy is often associated with significant abnormal return. Even if the price of sovereign debt for most EITIaffiliated countries does react to the announcement of EITI candidacy status, the direction of change produces mixed results (significant positive response for seven countries versus significant negative response in four countries, and one country with no significant result obtained).

The event study analysis does not provide any explanation for these different responses. Several reasons might account for the mixed direction of effects. The relative dependency of a country on extractive resources at the time of EITI candidacy may determine whether investors respond positively to EITI membership. Although most EITI-affiliated countries are resource-rich developing nations, the degree of dependency on natural resources varies: World Bank data from 2000 to 2016 show that the average percentage of GDP derived from natural resource rents for all EITI-affiliated countries ranged between less than 1 percent and 47 percent. Moreover, resource dependence fluctuates over time for individual countries: for example, the Republic of the Congo derived 62 percent of its GDP from natural resources in 2000 against 25 percent in 2016.

While the Granger causality analysis found that the percentage of GDP derived from natural resource rents had no effect on the relationship between EITI membership status and the price of sovereign debt, it could be the case that resource dependency does not enter directly into the calculus made by investors in response to EITI membership but rather is internalized in other ways. For example, it could be that the risk associated with resource dependence is already internalized in the

price of sovereign debt at the time of the EITI membership announcement. In that case, resource dependence could influence how investors respond to an EITI candidacy announcement without having a direct causal relationship with the price of sovereign debt.

Does EITI Membership Affect Investor Expectations on a Country's Long-Term Fiscal Management Position? The Cases of Indonesia and Senegal

EITI membership may not have as large an impact on revenue management credibility as it has been credited with. However, our results indicate that it is possible that the impact of EITI membership on investor expectations is more heavily influenced by country-specific conditions than can be accounted for in the econometric analysis above. Previously, we have discussed that EITI's overall problem-solving effectiveness can be examined through the fifth pathway to the effectiveness of partnerships, introduced in Chapter 1. Essentially, the effectiveness of EITI can be equated with its influence on collaboration and institutions external to the EITI itself; namely, the domestic political, financial and civil institutions of EITI implementing countries, which in turn may influence investor expectations and the price of sovereign debt examined in this study. In other words, the extent to which the EITI can impact and exert change on existing economic and political institutions of an implementing country is likely to determine how effective the partnership may be at achieving its goals of transparency and accountability in the extractive sector.

The stated goal of the EITI is to reduce corruption through transparency over payments between state institutions and extractive industries. The most important mechanism in the EITI is the reconciliation of payments between oil and mining firms in resource-rich countries and those countries' governments. Ideally, mandatory disclosure of payments between the state and extractive companies would reduce corruption by making it more difficult to hide corrupt practices from the public. However, there is no one-size-fits-all regarding EITI structure nor in how the EITI interacts with existing regulations, laws and incentives structures. The latter vary greatly depending on national contexts. The evaluation of EITI effectiveness should thus be complemented by countryspecific case studies.

To complement the econometric analysis summarized above, we have selected two EITI implementing countries for further discussion: Indonesia and Senegal. These countries were chosen because their outcomes in the event study were either negative or insignificant, which runs counter to the expectations of the literature on EITI membership outcomes. The objective is to explore why these two countries display results that run counter to prevailing assumptions; since these countries do not fit the theoretical assumptions developed above, they could provide more insights as to how investor expectations are influenced by EITI affiliation or not.

EITI in Indonesia

After a brief overview of the EITI in Indonesia and its governance mechanisms in place at the time of EITI candidacy, we discuss how effective the EITI has been at influencing the underlying political and economic institutions in Indonesia with a view to achieving its stated goals.

Indonesia became an EITI Candidate country on 19 October 2010. The EITI in Indonesia consists of three main bodies: a steering committee, an implementation team and a transparency team. All three include representatives from the central and regional governments and civil society, while representatives from the extractive industries sit only on the implementation and transparency teams (EITI Indonesia 2020a). The steering group is responsible for appointing members of the other two committees for fixed terms of three years, based on recommendations from the Minister of Home Affairs, business associations and civil society organizations (Republic of Indonesia 2010). Article 8 of Presidential Regulation of the Republic of Indonesia No. 2010-26 gives the transparency team authority to request data and information from central and regional governments, extractives sector companies and other stakeholders (Republic of Indonesia 2010). The implementation team is tasked with collecting reports for reconciliation from the central and local governments, BPMigas (a former government authority that oversaw upstream oil and gas activity and was dissolved by the Constitutional Court in November 2012) and private sector companies (Republic of Indonesia 2010). Reports submitted by government entities are first reviewed by the Agency for Finance and Development Supervision (BPKP), while private-sector reports are required to have been verified by an independent auditor (Republic of Indonesia 2010). These reports are then reconciled by a reconciler appointed by the implementing team. All costs for these activities are provided through the national budget (Republic of Indonesia 2010).

Indonesia has a history of resource reliance. However, compared to other resource-rich developing countries, Indonesia has been successful at diversifying its economy in recognition of the dangers posed to it by volatile commodity prices (Dunning 2005). The reasons behind diversification could provide some insight into why investors seem to lack confidence that the EITI will lead to better management of resource revenues. Any economy highly dependent on resources is exposed to volatility risk due to fluctuations in the global price of those resources. However, diversification also creates alternative power bases outside the control of national political elites. Economic diversification in resource-rich developing nations can thus be presented as a calculated trade-off between economic growth and the risk of political instability.

Suharto, president of Indonesia from 1968 to 1998, began the process of diversifying the Indonesian economy away from reliance on natural resources. In his 2005 paper, Thad Dunning develops a framework for assessing the trade-off between economic growth and political rivalry that governments of resource-rich countries experience, using Indonesia as one of the case studies. The paper states that,

Suharto's diversification programme was therefore premised on political logic, in that he empowered a private sector dominated by a small group of ethnic minority Chinese, whose ethnicity precisely served to discount any credible future claim they could lay on national political power.

(Dunning 2005, p.469)

In essence, diversification of Indonesia's economy was possible from a political standpoint only because those who benefited the most from diversification did not pose a threat to Suharto's power. The result was that the Indonesian economy could diversify without creating substantive power bases outside the control of the existing regime.

Rising commodity prices from 2003 to 2008 provided a boon to the Indonesian economy that it was not prepared for and therefore did not fully exploit (World Bank 2010a). The systems of economic governance put in place by Suharto remained even after his resignation and, by some assessments, played an important role in the political transition that took place in Indonesia in the early and mid-2000s (Dunning 2005). Dunning also provides a potential explanation for this: that "resource dependence is the outcome of strategic decisions by incumbent elites to limit the extent to which political opponents can challenge their power" (Dunning 2005, p.475). It is possible that the incomplete diversification of Indonesia's economy and its failure to utilize these windfall revenues were a result of this political calculation. Indeed, windfall revenues were spent on subsidies rather than investment, and oil and gas production did not increase in response to rising global prices throughout the 2000s (World Bank 2010a). In order to take full advantage of these revenues, the government would have needed to allocate the majority toward productive investment. However, this could only be done if the result of these investments did not present a significant threat to the government's power base.

Do these factors influence how investors responded to Indonesia's announcement of EITI candidacy? This study identifies four possible factors that could have influenced investor expectations around the time that EITI candidacy was announced in 2010. First, the mechanisms of resource revenue distribution can have a significant impact on investor perception of how efficiently the government will manage its resource revenue. Division of resource revenue between the central and regional governments is governed by two pieces of legislation: Law No. 33 of 2004 and Government Regulation 55 of 2005. The proportion of non-tax revenues going to the regions are: 15 percent from oil, 30 percent from natural gas and 80 percent from mining (KAP Gideon Adi and Rekan, 2014a, b). Additional dividends are paid to the government by four mining companies in which the government holds partial ownership (KAP Gideon Adi and Rekan 2014a). Royalties for minerals are calculated based on the value per ton/kg sold or exported, rather than the extracted amount (KAP Gideon Adi and Rekan 2014a). However, there are some exceptions to this schema. In three regions with special autonomy, Aceh, Papua and West Papua, the local government receives 70 percent of oil and gas revenues generated in those provinces (KAP Gideon Adi and

Rekan 2014b). Article 28 of Government Regulation No. 55 of 2005 states that after the revenue-sharing calculation is made, there is a reconciliation process between the central government and local authorities in producing regions (KAP Gideon Adi and Rekan 2014b). After the accounts are reconciled, there is a direct cash transfer to the local authorities. The central government's financial report for 2010 indicated that 23 percent of national government revenues came from the oil and gas sector, while 8.2 percent came from the mining sector (KAP Gideon Adi and Rekan 2014a, KAP Gideon Adi and Rekan 2014b).

There are a few aspects of this process of revenue distribution that could influence investor behavior. Most significantly, the reconciliation process is not clear nor is there any mention of who has authority over this process or what steps are taken if there is a discrepancy in reporting. Lack of clarity in the reconciliation and reporting process is at the core of what the EITI attempts to resolve. In the minds of investors, there may still be room for doubt that this process is being managed efficiently, and there appears to be little safeguard against corruption throughout the reconciliation process. Indeed, this is a demonstration of the conditions for effectiveness, presented in Chapter 2 of this volume, which highlight the relevance of credibility in the soft contractual arrangements of a specific partnership and related adaptability to contextual factors with a view to attainment of partnership goals. The EITI has no mechanism for enforcement of a country's commitments as part of the EITI engagement. The only way to ensure accountability is by threat of EITI status being suspended, beyond lobbying and diplomatic pressure by international development actors. If sanctioning mechanisms and accountability incentives are not credible, it could undermine the effectiveness of the partnership regime. Alternatively, if investors can see that the government is seriously investing in transparency and compliance, this may be a strong commitment signal.

Secondly, the Indonesian government's method for allocation and disbursement of the funds it receives is central to the investor expectations reflected in sovereign debt markets. The World Bank assessment (2010b) reported that the Indonesian government consistently delayed the disbursement of funds in the leadup to EITI candidacy, which slowed GDP growth (World Bank 2010b). Further, the central government did not place enough of a priority on public investment in infrastructure, which constrained the private sector despite rising FDI inflows (World Bank 2010b). The government budget for 2011 had increased the amount allocated for capital investment (World Bank 2010b), but it is possible this was not enough to satisfy investor concerns.

Third, investors may not be convinced that the legal framework governing the extractives sector is sufficient to ensure that EITI transparency mechanisms function as intended. The right to produce in the extractives sector is awarded exclusively by the central government. The terms of mineral contracts are *lex specialis*, which means these contracts are not subject to changes in government regulation or taxation regimes over the time spans they cover (KAP Gideon Adi and Rekan 2014a). In effect, these extraction contracts operate outside of the general legal and regulatory framework of Indonesia, which may present an opportunity for corrupt activities by industry, government actors or both.

Different types of contracts are awarded during different stages of production, and each is associated with different taxation, royalty and customs payment obligations (KAP Gideon Adi and Rekan 2014a). Moreover, government-controlled entities, such as BPMigas and Pertamina (the state-controlled oil and gas company), have significant authority in the management and supervision of upstream and downstream oil and gas extraction (KAP Gideon Adi and Rekan 2014b). To test if the state-owned nature of the oil and gas industry could potentially be an issue, we reran the panel-level Granger causality test as shown in the results section of this paper with an additional dummy variable, indicating a state-owned oil or gas company in operation. Results demonstrate that the presence of such a state-owned enterprise has no significant effect on the interaction between EITI membership status and the price of sovereign debt. Despite the lack of econometric evidence, there is anecdotal evidence that investor perceptions are negatively impacted by the lack of clear separation of regulatory authority in the extractives space (World Bank 2010a).

Finally, there may be significant doubt among investors that EITI mechanisms in Indonesia actually function as intended. The official EITI report from 2010 states that not all companies in the extractives sector submitted reports for reconciliation. Further, in order to reconcile tax information, the government taxation body required a letter of authorization from the company to disclose that information. Several companies did not authorize the disclosure; thus, their tax information could not be reconciled within the scope of the 2010 EITI report. Although only a few companies were excluded from the reconciliation and analysis, EITI regulatory bodies could not compel these companies to report under the current framework. This lack of authority to compel companies to comply with EITI principles could be one reason why investors did not have confidence that the EITI would function as a transparent mechanism.

In sum, EITI implementation in Indonesia is heavily weighted toward government control and oversight, and civil society has very little say in the functioning of the EITI beyond an advisory role. Further, EITI bodies lack authority to compel companies to comply with the transparency measures. However, this analysis shows that the greatest hindrance toward the EITI facilitating the effective use of resource revenues may be the government itself. The government's hesitation in using resource revenue to invest in diversification and infrastructure means investors may perceive the EITI as too little too late. If investors did not think the EITI went far enough to facilitate change in how the government of Indonesia manages its resource revenues, this could explain why the announcement of EITI candidacy had a negative impact on the price of sovereign debt.

EITI in Senegal

Senegal became an EITI Candidate country in July 2013. The government of Senegal formally established the EITI Senegal by decree No. 2013-881, which outlines the organization and functioning of the National Committee (World Bank 2016). As in Indonesia, all costs for EITI Senegal's operations come out of the

central government budget. The Steering Committee of the EITI is charged with installing a technical secretariat (Republique du Senegal 2013). EITI Senegal is governed by a multi-stakeholder group, which comprises 26 members from government, the private sector and civil society (EITI Senegal 2020). The principal legislation that governs the activities of the mining sector was set in decree No. 2004-647 in May 2004 and was revised around the same time that EITI candidacy was officially announced in 2013 (World Bank 2016). Extractive industry companies operating in Senegal make payments to the local and central governments, although they benefit from certain exemptions during their first three years of activity (Republique du Senegal 2013).

The first EITI Senegal report produced (Republique du Senegal 2013) exposes a significant lack of information transparency in all aspects of EITI processes. Six of the 13 companies in the hydrocarbons sector and five of the 25 companies in the mining sector did not submit EITI declarations for reconciliation. The report further states that of those that did, only two of the hydrocarbons companies and seven of the mining sector companies submitted documents that were reviewed by an external auditor. The report itself notes that the reconcilers were not able to produce a reliable assessment based on the limited data received. Data on the state of the extractives sector in Senegal as a whole are limited, with very little reliable information on either reserves or artisan and small-scale mining activity. Furthermore, the reconcilers were not able to confidently establish how much the extractives sector contributed to Senegal's budget for the year 2013. There are even difficulties in establishing all actors in the extractives sector: the mining code dictates that the titles of mining companies can only be communicated publicly with the written permission of the title holders. The report summarizes these difficulties in their recommendations, stating that it is essential the Steering Committee act aggressively to increase awareness about the EITI and the importance of transparency. These recommendations (Republique du Senegal 2013) are in line with Proposition 1 of the conditions for partnership effectiveness presented in Chapter 2: that the establishment of specific commitments and accountability mechanisms will likely increase the effectiveness of partnerships. In the case of Senegal, these steps cannot be taken until there is more complete information available regarding the status of the commitments from both private-sector and government actors.

What impact does this have on investor expectations? Using publicly available data, the World Bank's (2016) Senegal report showed a USD 21 million discrepancy between declared tax payments and tax revenues. This problem would be exacerbated by the discovery of new oil fields off the coast of Senegal and the commencement of new mining operations in 2013 and 2014 (World Bank 2016). The World Bank (2016) report also describes how the government of Senegal acknowledged that the lack of data was problematic and sought to improve the investment climate by implementing a review of the extractives sector. The EITI could have been one avenue that the government used to increase its legitimacy on transparency and accountability, although it appears to have done little to shore up investor confidence. While the lack of data was a problem, it was set against

the backdrop of strong macroeconomic fundamentals and a relatively strong and stable democracy. A sound economic and political system can mitigate the concerns of investors to a degree, but a lack of information could still prove to be a major reason why investors did not have confidence that implementation of the EITI would actually indicate the government could effectively manage its resource revenue.

One explanation for why investors did not demonstrate a significant response to the announcement of EITI candidacy status is that the government made public its intent to seek candidacy status one full year before it submitted the official application for candidature (World Bank 2016). By the time candidacy status was officially announced, it had already been priced into the sovereign debt market and thus investors had little new information to react to. It is possible that in the time between the government making public its intention to pursue EITI candidacy and the time that candidacy was officially announced, investors did not recognize that there would be substantive change to the regulatory regime with EITI implementation. These are important considerations that could account for why investors did not react to the official announcement.

EITI Effectiveness

In this study, we assess EITI effectiveness on institutions outside the partnerships within the fifth pathway of the analytical framework described in Chapter 1, a pathway that appears to be strongly related to a partnership's overall problemsolving effectiveness and goal attainment. After discussing the results of a paneldata econometric analysis, two individual case studies show how critical it is to examine EITI effectiveness within a country-specific context. In the Indonesian case, the EITI appears to have been largely ineffective at exacting change on existing political and economic institutions. The EITI was implemented around preexisting structures in the framework of a diversification agenda managed by political elites. No strong mechanisms were put in place to change how existing institutions operate or to exert additional oversight, at least on the basis of publicly available information. Looking at EITI effectiveness in Senegal does not allow one to draw a clear conclusion, partly because of the lack of available data at the time of the EITI candidacy announcement. Better data and stronger evidence on the degree of improvement in financial reporting in the extractives sector remain necessary to assess the extent to which the EITI has effectively moved forward in achieving its stated goals.

While the empirical literature on EITI effectiveness has so far focused on quantitative indicators without much regard to country-specific contextual circumstances of implementation, a detailed analysis of institutional dynamics in individual implementing countries provides a better understanding of how and why the EITI has succeeded in achieving its objectives under specific circumstances. The case studies presented above demonstrate how the effectiveness of EITI can be determined by the unique characteristics of the political and economic contexts in which it is applied. In the same way, Fraser and Carbonnier (2020) show that terror events shape investor expectations in different industries to varying degrees.

Indeed, it may even be necessary for the EITI to adapt to the political context of an implementing country if it is to be effective at all, as Proposition 3 of the analytical framework (Chapter 1) stipulates with respect to the adaptability of partnership arrangements to different institutional contexts and challenges as a condition for greater effectiveness. The EITI relies on accountability mechanisms and the enforcement of transparency rules to effect any real change in the extractives sector. The power to enforce EITI commitments derives from various factors and actors depending on the specific institutional context: there is no one-size-fitsall pathway to effectiveness when it comes to a multi-stakeholder initiative such as the EITI (Andonova and Carbonnier 2014).

This study aimed to analyze the effectiveness of the EITI through the lens of investor confidence. Investor expectations on how EITI membership may affect resource revenue management is directly tied to how investors expect the EITI to interact with the political and economic dynamics of an implementing country. Thus, one can interpret the results of this study as an indication that investor expectations on EITI effectiveness are inherently shaped by how they perceive the EITI in context, i.e., that the multi-stakeholder initiative adapts depending on specific politico-economic interactions in implementing countries.

Conclusions

This chapter presents the first analysis of its kind on the effectiveness of EITI with respect to investor expectations as reflected in movements in the price of sovereign debt, using a rigorous analytical framework and providing insights about mechanisms for evaluating the effectiveness of resource governance regimes. The study presents and discusses the results of a panel-level and country-level Granger causality as well as an event study focusing on the relationship between EITI status and investor confidence. Two additional country studies show that it is crucial to evaluate the effectiveness of EITI in interaction with the specific political and economic structures in which the partnership is embedded. The interaction between the EITI and national institutional dynamics seems in fact more important in determining partnership effectiveness than the structure and governance of the EITI itself.

The EITI appears to be effective when contextual characteristics allow the partnership to exert significant checks-and-balances functions. Furthermore, proper incentive structures and oversight mechanisms play an important role in instilling confidence in a credible EITI governance regime. The analytical framework put forth in this volume can serve as a catalyst for further research on the effectiveness of partnerships and governance regimes in the extractive sector. Even more importantly, its application to the present chapter suggests that for partnerships that seek to influence institutions beyond the partners themselves (for example, by promoting transparency), prevailing institutional dynamics and contextual factors are likely to play a major role in shaping partnership effectiveness.

Note

1 Yemen is considered here to have withdrawn from EITI. In actuality, it was suspended following political instability and eventually delisted from EITI.

References

- Andonova, Liliana and Gilles Carbonnier. 2014. Business-Humanitarian Partnerships: Processes of Normative Legitimation. *Globalizations*, 11:3, 349–367.
- Campbell, John Y., Andrew W. Lo and A. Craig MacKinlay. 1997. The Econometrics of Financial Markets. Princeton, NJ: Princeton University Press.
- Carbonnier, Gilles. 2013. La Malédiction des Ressources Naturelles et Ses Antidotes. *Revue Internationale et Stratégique*, 91, 38–48.
- Center for Systemic Peace. 2019. Polity 4: Regime Authority Characteristics and Transitions Datasets. Available at http://www.systemicpeace.org/ inscrdata.html.
- Corrigan, Caitlin C. 2017. The Effects of Increased Revenue Transparency in the Extractives Sector: The Case of the Extractive Industries Transparency Initiative. *The Extractive Industries and Society*, 4:4, 779–787.
- David-Barrett, Liz and Ken Okamura. 2013. The Transparency Paradox: Why do Corrupt Countries Join EITI? Working Paper No. 38. European Research Center for Anti-Corruption and State-Building. Available at: https://eiti.org/document/transparency -paradox-why-do-corrupt-countries-join-eiti.
- Dunning, Thad. 2005. Resource Dependent, Economic Performance, and Political Stability. Journal of Conflict Resolution, 49:4, 451–482.
- EITI Indonesia. 2020a. Indonesia Extractive Industries Transparency Initiative. *EITI Indonesia* Available at http://eiti.ekon.go.id/en/.
- EITI Senegal. 2020b. Initiative pour la Transparence dans les Industries Extractives du Senegal. *ITIE Senegal*. Available at http://itie.sn.
- Extractive Industries Transparency Initiative (EITI). 2019. Publications. *EITI*. Available at https://eiti.org/publications.
- Frankel, Jeffrey A. 2012. The Natural Resource Curse: A Survey of Diagnoses and Some Prescriptions. HKS Faculty Research Working Paper Series RWP12-014. Cambridge, MA: John F. Kennedy School of Government, Harvard University.
- Fraser, Jamie and Gilles Carbonnier. 2020. Valuation Responses to Random Changes in Perceived Risk: The Impact of Terrorism on the Defence Sector. *Defence & Peace Economics*, 33:1, 77–92.
- Furstenberg, Saipira. 2015. Consolidating Global Governance in Nondemocratic Countries: Critical Reflections on the Extractive Industries Transparency Initiative (EITI) in Kyrgyzstan. *The Extractive Industries and Society*, 2:3, 462–472.
- Gelb, Alan, Benn Eifery and Nils Borje Tallroth. 2002. *The Political Economy of Fiscal Policy and Economic Management in Oil-Exporting Countries*. Policy Research Working Papers. Washington, DC: The World Bank.
- KAP Gideon Adi & Rekan. 2014a. EITI Reconciler's Report 2010 and 2011, Mining Sector. *EITI Indonesia*. Available at http://eiti.ekon.go.id/en/category/download/ laporan/laporan-eiti/.
- KAP Gideon Adi & Rekan. 2014b. EITI Reconciler's Report 2010 and 2011, Oil and Gas Sector. *EITI Indonesia*. Available at http://eiti.ekon.go.id/en/category/download/ laporan/laporan-eiti/.

- Kasekende, Elizabeth, Charles Abuka and Mare Sarr. 2016. Extractive Industries and Corruption: Investigating the Effectiveness of EITI as a Scrutiny Mechanism. *Resources Policy*, 28, 117–128.
- Malden, Alexander. 2017. A Safer Bet? Evaluating the Effects of the Extractive Industries Transparency Initiative on Mineral Investment Climate Attractiveness. *The Extractive Industries and Society*, 4:4, 788–794.
- Ocheje, Paul D. 2006. The Extractive Industries Transparency Initiative (EITI): Voluntary Codes of Conduct, Poverty and Accountability in Africa. *Journal of Sustainable Development in Africa*, 8, 222–239.
- Öge, Karem. 2016a. To Disclose or Not to Disclose: how Global Competition for Foreign Direct Investment Influences Transparency Reforms in Extractive Industries. *Energy Policy*, 98, 133–141.
- Öge, Karem. 2016b. Which Transparency Matters? Compliance with Anti-Corruption Efforts in Extractive Industries. *Resources Policy*, 49, 41–50.
- Öge, Karem. 2017. Transparent Autocracies: The Extractive Industries Transparency Initiative (EITI) and Civil Society in Authoritarian States. *The Extractive Industries and Society*, 4:4, 816–824.
- Orihuela, José Carlos. 2013. How do Mineral States Learn? Path-Dependence, Networks and Policy Change in the Development of Economic Institutions. *World Development*, 43, 138–148.
- Republic of Indonesia. 2010. Presidential Regulation, Republic of Indonesia No. 26 Year 2010. Available at http://eiti.ekon.go.id/en/perpres-26-2010/.
- Republique du Senegal. 2013. Rapport de conciliation. *ITIE Senegal*, Available at: http://itie.sn/rapport-2013/.
- Schmaljohann, Maya. 2013. Enhancing Foreign Direct Investment via Transparency? Evaluating the Effects of the EITI on FDI. Discussion Paper Series No. 538. Heidelberg: Department of Economics, University of Heidelberg.
- Sovacool, Benjamin K. and Nathan Andrews. 2015. Does Transparency Matter? Evaluating the Governance Impacts of the Extractive Industries Transparency Initiative (EITI) in Azerbaijan and Liberia. *Resources Policy*, 45, 183–192.
- Sovacool, Benjamin K., Götz Walter, Thijs van de Graaf and Nathan Andrews. 2016. Energy Governance, Transnational Rules, and the Resource Curse: Exploring the Effectiveness of the Extractives Industries Transparency Initiative (EITI). *World Development*, 83, 179–192.
- Thomson Reuters DataStream. 2019. Time Series, 2000–2017. [database]. Thomson Reuters. Available at http://www.financial.tr.com/datastream.
- Tornell, Aaron and Philip R. Lane. 1999. The Voracity Effect. *American Economic Review*, 89:1, 22–46.
- Transparency International. 2019. Corruption Perceptions Index 2018. [database]. Transparency International. Available at https://www.transparency.org/cpi2018.
- Van der Ploeg, Frederick and Steven Poelhekke. 2009. Volatility and the Natural Resource Curse. Oxford Economic Papers, 61:4, 727–760.
- Villar, Paul Fenton and ElissaiosPapyrakis . 2017. Evaluating the Impact of the Extractive Industries Transparency Initiative (EITI) on Corruption in Zambia. *The Extractive Industries and Society*, 4:4, 795–805.
- Weinthal, Erika and Pauline Jones Luong. 2006. Combating the Resource Curse: An Alternative Solution to Managing Mineral Wealth. *Perspectives on Politics*, 4:1, 35–53.

- World Bank. 2010a. Boom, Bust and Up Again? Evolution, Drivers and Impact of Commodity Prices: Implications for Indonesia. World Bank Trade Development Reports. Washington, DC: World Bank.
- World Bank. 2010b. Indonesia Economic Quarterly. Washington, DC: World Bank.
- World Bank. 2016. Report No. PP1924. Project Paper on a Proposed Grant. Available at https://documents1.worldbank.org/curated/en/373311474563720646/text/PP1924-PJPR -OUO-9-Project-Paper-has-been-approved-P160022.txt.
- World Bank Indicators. 2019a. GDP Growth (Annual %). [database]. World Bank Group. Available at https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG.
- World Bank Indicators. 2019b. IBRD Loans and IDA credits (DOD, current US\$). [database]. World Bank Group. Available at https://data.worldbank.org/indicator/DT .DOD. MWBG.CD.
- World Bank Indicators. 2019c. Total Natural Resources Rents (% of GDP). [database]. World Bank Group. Available at https://data.worldbank.org/indicator/NY.GDP.TOTL. RT.ZS.
- World Bank Indicators. 2020. Inflation, Consumer Prices (Annual %). [database]. World Bank Group. Available at https://data.worldbank.org/indicator/FP.CPI.TOTL.ZG.
- Zhang, Yanchun, Viridiana Garcia-Quiles and Nina Thelen. 2015. Riding the Commodity Rollercoaster: Natural Resource Management in the Context of Increasing Commodity Price Volatility. *Comparative Economic Studies*, 57:2, 305–325.